

EXHIBIT 1

STENOGRAPHICALLY REPORTED BY:
21 REBECCA L. ROMANO, RPR, CSR, CCR
California CSR No. 12546
22 Nevada CCR No. 827
Oregon CSR No. 20-0466
23 Washington CCR No. 3491
24 JOB NO. 5971107
25 PAGES 1 - 297

14 DEPOSITION OF MICHAEL J. LASINSKI, taken
15 on behalf of the Defendant, at Willkie Farr &
16 Gallagher, LLP, One Front Street, 34th Floor,
17 San Francisco, California, commencing at
18 10:19 a.m., Thursday, June 29, 2023 before
19 REBECCA L. ROMANO, a Certified Shorthand Reporter,
20 Certified Court Reporter, Registered Professional
21 Reporter.

1 APPEARANCES OF COUNSEL
2

3 For the Plaintiffs:

4 BOIES SCHILLER FLEXNER

5 BY: JAMES LEE

6 Attorney at Law

7 100 SE Second Street

8 Suite 2800

9 Miami, Florida 33131

10 (305) 357-8434

11 jlee@bsfllp.com

12 and

13 BY: HSIAO (MARK) C. MAO(via Web conference)

14 Attorney at Law

15 44 Montgomery Street

16 41st Floor

17 San Francisco, California 94104

18 (415) 293-6800

19 mmao@bsfllp.com

20
21
22
23
24
25 // / / /

1 APPEARANCES OF COUNSEL (cont'd)
2

3 For the Plaintiffs:

4 MORGAN & MORGAN

5 BY: RYAN JOSEPH McGEE (via Web conference)

6 BY: JOHN A. YANCHUNIS (via Web conference)

7 Attorneys at Law

8 201 N. Franklin Street

9 7th Floor

10 Tampa, Florida 33602

11 (813) 223-5505

12 rmcgee@forthepeople.com

13 jyanchunis@forthepeople.com

14 and

15 SUSMAN GODFREY LLP

16 BY: RYAN SILA (via Web conference)

17 Attorney at Law

18 1301 6th Avenue

19 New York, New York 10019

20 (212) 336-8330

21 rsila@susmangodfrey.com

22
23
24
25 // / / /

1 APPEARANCES OF COUNSEL (cont'd)
2

3 For the Defendant:

4 WILLKIE FARR & GALLAGHER, LLP

5 BY: EDUARDO E. SANTACANA

6 BY: HARRIS MATEEN(via Web conference)

7 Attorneys at Law

8 One Front Street

9 34th Floor

10 San Francisco, California 94111

11 (415) 858-7421

12 esantacana@willkie.com

13 hmateen@willkie.com

14

15

16

17

18

19 ALSO PRESENT:

20 Kevin Kuete-Fodouop, Summer Associate Susman &
21 Godfrey LLP

22 Shawna Hynes, Videographer

23

24

25 /////

1 APPEARANCES (cont'd)
2
3 ALSO PRESENT: (via Web conference)
4 Lillian Dai, Litigation Consulting, IP
5 Analysis
6 Diego A. Focanti, Analysis Group
7 Anindya Ghose, Heinz Riehl Professor at New
8 York University
9 Christopher R. Knittel, Sloan School of
10 Management MIT
11 Niall H. MacMenamin, Executive Vice President,
12 Compass Lexecon
13 Celeste Peifer, Willkie Farr & Gallagher, LLP
14 Samit Warty, Ph.D., Analysis Group
15 Christopher L. Schulte, Managing Director,
16 Ankura
17
18
19
20
21
22
23
24
25 //

1	I N D E X		
2	DEPONENT	EXAMINATION	
3	MICHAEL J. LASINSKI	PAGE	
4	VOLUME 1		
5	BY MR. SANTACANA	12	
6	BY MR. LEE	270	
7	BY MR. SANTACANA	276	
8			
9			
10	E X H I B I T S		
11	NUMBER	PAGE	
12		DESCRIPTION	
13	Exhibit 1	Expert Report of Michael J.	16
14		Lasinski dated February 20,	
15		2023;	
16			
17	Exhibit 2	Native Excel Spreadsheet,	140
18		GOOG-RDRZ-00188768;	
19			
20	Exhibit 3	Defendant Google LLC's	163
21		Supplemental Objections and	
22		Responses to Plaintiffs'	
23		Interrogatories, Set Six (Nos.	
24		12, 16 & 17);	
25	////		

1	E X H I B I T S (cont'd)	
2	NUMBER	PAGE
3	DESCRIPTION	
4	Exhibit 4	Defendant Google LLC's Second
5		Supplemental Objections and
6		Responses to Plaintiffs'
7		Interrogatories, Set Six.
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25	/ / / /	

1 San Francisco, California; Thursday, June 29, 2023
2 10:19 a.m.
3 ----oo---
4
5 THE VIDEOGRAPHER: We are going on the 10:20:29
6 record at 10:19 a.m. on June 29th, 2023.
7 Please note that the microphones are
8 sensitive and may pick up whispering and private
9 conversations. Please mute your phones at this
10 time. Audio and video recording will continue to 10:20:44
11 take place unless all parties agree to go off the
12 record.
13 This is Media Unit 1 of the
14 video-recorded deposition of Michael Lasinski in
15 the matter of Anibal Rodriguez, et al., versus 10:21:03
16 Google LLC, filed in the United States
17 District Court, Northern District of California.
18 Case No. 3:20-cv-04688-RS.
19 The location of the deposition is One
20 Front Street, 34th Floor, San Francisco, California 10:21:25
21 94111.
22 My name is Shawna Hynes, representing
23 Veritext Legal Solutions, and I'm the videographer.
24 The court reporter is Rebecca Romano from
25 the firm Veritext Legal Solutions. 10:21:41

1 I am not related to any party in this 10:21:45
2 action nor am I financially interested in the
3 outcome.
4 If there are any objections to
5 proceeding, please state them at the time of your 10:21:54
6 appearance.
7 Counsel present will now state their
8 appearances and affiliations for the record
9 beginning with the noticing attorney. For those
10 appearing remotely, the court reporter has noted 10:22:06
11 your appearances for the record.
12 MR. SANTACANA: Eduardo Santacana,
13 Willkie Farr & Gallagher, for Google.
14 MR. LEE: James Lee, Boies Schiller
15 Flexner, for the plaintiffs. 10:22:19
16 And I have with me a summer intern, who I
17 will allow him to introduce himself.
18 MR. KUATE-FODOUOP: Kevin Kuate-Fodouop
19 with Susman Godfrey.
20 THE VIDEOGRAPHER: Can you state that one 10:22:28
21 more time loud.
22 MR. KUATE-FODOUOP: Kevin Kuate-Fodouop
23 with Susman Godfrey.
24 THE VIDEOGRAPHER: Thank you.
25 Will the court reporter please swear in 10:22:36

1 the witness, and then counsel may proceed. 10:22:37
2 THE COURT REPORTER: If you could raise
3 your right hand for me, please.
4 THE DEPONENT: (Complies.)
5 THE COURT REPORTER: You do solemnly 10:22:39
6 state, under penalty of perjury, that the testimony
7 you are about to give in this deposition shall be
8 the truth, the whole truth and nothing but the
9 truth?
10 THE DEPONENT: I do. 10:22:40
11
12
13
14
15 10:22:40
16
17
18
19
20 10:22:40
21
22
23
24
25 // 10:22:51

1 MICHAEL J. LASINSKI, 10:22:51

2 having been administered an oath, was examined and
3 testified as follows:

4

5 EXAMINATION 10:22:51

6 BY MR. SANTACANA:

7 Q. Good morning, Mr. Lasinski. It's nice to
8 meet you. I will be asking you some questions
9 today.

10 Have you testified before? 10:23:00

11 A. I have, yes.

12 Q. How many depositions have you sat for?

13 A. I would estimate approximately 40.

14 Q. Okay. So you know the ropes.

15 MR. LEE: Objection. Form. 10:23:11

16 THE DEPONENT: I've -- I have been
17 deposed many times.

18 Q. (By Mr. Santacana) Okay. Any reason you
19 can't testify truthfully today?

20 A. No. 10:23:18

21 Q. How many expert engagements do you think
22 you've had over the course of your career?

23 A. Probably 150, 200.

24 Q. Who is representing you today in this
25 deposition? 10:23:43

1 A. Mr. Lee. 10:23:44

2 Q. Have you retained Mr. Lee as your lawyer?

3 A. I have not retained him as my lawyer, no.

4 Q. Okay. And have you paid him to represent
5 you today? 10:23:55

6 A. I am not paying him to represent me.

7 Q. Do you have any other lawyers in this
8 case?

9 A. Well, there are other lawyers in this
10 case, yes. There are lawyers from Susman Godfrey,
11 and there are lawyers from Morgan & Morgan. 10:24:05

12 Q. You haven't retained any of them?

13 A. I have not.

14 Q. Okay. And did you retain any lawyers to
15 respond to the subpoena that you were issued? 10:24:16

16 A. I did not, no.

17 Q. Who handled the response to the subpoena?

18 A. The lawyers in this matter did.

19 Q. Did you review the subpoena?

20 A. I did. 10:24:27

21 Q. How many hours have you spent on this
22 engagement?

23 A. I would have to estimate.

24 Q. Sure.

25 A. 160, 200, somewhere in there. 10:24:41

1 Q. Anyone else work with you on this expert 10:24:47
2 engagement?
3 A. Yes.
4 Q. Who?
5 A. Chris Schulte from my firm. Also Rujuta. 10:24:53
6 I cannot remember her last name, also from my firm.
7 And then Meryn Campbell from my firm.
8 Q. Did your hours estimate just now include
9 their time?
10 A. No. 10:25:14
11 Q. Roughly how much time do you think they
12 together have spent on this?
13 A. I mean, roughly, altogether, I would
14 imagine it's over a thousand hours, but maybe
15 closer to 1,500 hours. 10:25:26
16 Q. What's your role at Ankura Consulting?
17 A. I have two roles -- three roles.
18 I lead the intellectual group at Ankura
19 Consulting. I have clients, like what I do here
20 today. And then I also mentor staff people at 10:25:50
21 Ankura.
22 Q. Do you own a share of Ankura's profits?
23 A. I have shares in the firm.
24 Q. So higher profits, you get paid more?
25 A. No, that's not how it works. 10:26:14

1 Q. Okay. Apart from compensation related to 10:26:16
2 your hourly rate, do you get any compensation from
3 Ankura based on the performance of the consulting
4 firm?

5 A. To -- actually, for me, it's a black box. 10:26:33
6 So my -- my boss sets my bonus. So I don't know
7 how that -- how that works.

8 Q. Okay. But you get paid a bonus at the
9 end of the year, I guess?

10 A. I -- it's possible that I would get paid 10:26:47
11 a bonus.

12 Q. How many times have you been retained as
13 an expert by the lawyers in this case?

14 A. Twice.

15 Q. What was the other time? 10:26:59

16 A. For the Brown case.

17 Q. You have no other current engagements
18 with them?

19 A. No, I do not.

20 Q. And you are including -- go ahead. 10:27:10

21 A. Just to be -- there are different law
22 firms here. I had been retained previously before
23 that by Susman Godfrey in other cases.

24 Q. How many times, approximately?

25 A. Approximately three other times. 10:27:25

1 Q. Okay. Were any of those cases consumer 10:27:27
2 class actions?

3 A. Yes.

4 Q. Which ones?

5 A. There was one for Susman & Godfrey 10:27:41
6 against Qualcomm.

7 Q. Okay. And then you haven't been
8 otherwise retained for anything else by the
9 Boies Schiller firm?

10 A. No. 10:27:56

11 Q. Or the Morgan & Morgan firm?

12 A. Not that I can remember, no.

13 Q. Okay. Can you describe for me or
14 summarize your assignment in this case?

15 A. Sure. 10:28:16

16 Q. Are you referring there to your report?

17 A. I am, yes.

18 Q. So why don't we mark it.

19 (Exhibit 1 was marked for identification
20 by the Court Reporter and is attached hereto.) 10:28:25

21 Q. (By Mr. Santacana) We've premarked the
22 digital version as Exhibit 1. So I guess
23 afterward, we can just mark this as 1A or something
24 in case you draw on it or something like that.

25 But go ahead. 10:28:38

1 A. Okay. 10:28:40

2 Q. Answer the question.

3 A. Sure. I describe what my assignment is
4 on Section 4 of my report.

5 And my assignment in this matter includes 10:28:44

6 "assessing the feasibility of identifying and
7 quantifying various measures of monetary relief
8 tied to Plaintiffs' claims," including those that I
9 discuss in my report, which include, in this case,
10 unjust enrichment and plaintiffs' actual damages. 10:29:04

11 Q. And -- sorry -- could you say again where
12 you are reading from?

13 A. This is Section 4 of my report.

14 Q. Okay. Thank you.

15 So apart from that description of your 10:29:15
16 assignment in Section 4 of your report, is there
17 anything else that you have done in this case in
18 your capacity as an expert witness?

19 A. Well --

20 MR. LEE: I'm sorry. I may have missed 10:29:29
21 it.

22 Are you limiting to just Section 4, or
23 the whole report?

24 Q. (By Mr. Santacana) I'm saying, other
25 than the assignment described in Section 4 -- let 10:29:36

1 me ask it a different way. 10:29:39

2 Other than your assignment as described
3 in Section 4 of your report, has there been any
4 other assignment that you've needed to perform as
5 an expert in this case? 10:29:45

6 A. The other portion of the assignment that
7 I performed is described in my report. And it
8 talks about the apportioning of monetary relief to
9 the classes and the class members.

10 I provide examples of apportionment 10:30:08
11 methods that are available. I think my report
12 explains what I did in great detail. So, you know,
13 there's -- there's a lot that goes into that
14 assignment.

15 Q. Is there any other -- 10:30:30

16 A. And I --

17 MR. LEE: Hold on -- hold on.

18 THE DEPONENT: And I just want to make
19 sure.

20 So there's a lot that goes into that 10:30:34
21 assignment, so I've -- you know, to the extent that
22 there are other portions of my report that go into
23 my opinion, they're in my report.

24 Q. (By Mr. Santacana) Fair enough.

25 Have you reached any expert conclusions 10:30:44

1 or opinions in this case other than those embodied 10:30:47
2 in your report?

3 A. Not at this time, I have not.

4 Q. And do you, sitting here now, have any
5 intention of presenting expert opinion in this case 10:30:57
6 other than those embodied or encompassed by your
7 report?

8 A. No, I have not been asked to do so at
9 this time.

10 Q. Did you read the expert reports that 10:31:09
11 rebut your report that were served by Google's
12 counsel?

13 A. I did, yes.

14 Q. And those are the Knittel report and the
15 Ghose report? 10:31:18

16 A. They are, yes.

17 Q. You reviewed those?

18 A. I did, yes.

19 Q. Did members of your team review those as
20 well? 10:31:24

21 A. They did.

22 Q. Is it your role in this case to provide
23 opinions that are favorable to the lawyers who have
24 retained you?

25 MR. LEE: Objection. Form. 10:31:43

1 THE DEPONENT: That -- that is not how I 10:31:43
2 understand my role, no.

3 Q. (By Mr. Santacana) How do you understand
4 your role?

5 A. My understand my role to provide an 10:31:48
6 independent opinion of my belief of what I talk
7 about in my report, which is my opinion of monetary
8 damages, specifically in this case unjust
9 enrichment and actual damages.

10 Q. If it turns out that you've made mistakes 10:32:09
11 in your report, are you open to correcting them?

12 A. Yes.

13 Q. Did you attempt to perform your
14 assignment in this case truthfully, honestly, and
15 according to a sound methodology? 10:32:21

16 A. I have, yes.

17 Q. And would you agree with me that your
18 obligation as an independent expert does not end
19 with your report; if you discover that there's
20 something wrong with it after you've served it, you 10:32:30
21 are obligated to admit that?

22 A. I don't know if I'm specifically
23 obligated to admit that, but that would be my
24 professional practice. I would never do anything
25 different than that. 10:32:45

1 Q. Fair enough. 10:32:46

2 Did you read any other expert reports in
3 this case from the plaintiffs or from Google other
4 than your own, of course, Knittel and Ghose?

5 A. I read Mr. Hochman's report. 10:33:01

6 I believe that there was another report,
7 if I'm remembering correct -- correctly, from a
8 Mr. Black. Or it might have been just a
9 declaration.

10 Q. Black had a report. 10:33:20

11 A. So -- so then it was -- then it was -- I
12 at least read parts of that report as well.

13 Q. Any others?

14 A. I may have, but I can't recall as I'm
15 sitting here. 10:33:30

16 Q. Hoffman (phonetic)?

17 A. I thought I said Mr. Hoffman.

18 Q. Mr. Hochman, yes. There's also a
19 Hoffman.

20 A. Oh, I don't recall if I did -- did or 10:33:38
21 not.

22 Oh, I'm sorry. I also -- Mr. Keegan's
23 report.

24 Q. Snyder (phonetic)?

25 A. I do not recall reading Mr. Snyder's 10:33:51

1 report. 10:33:53

2 Q. Okay. Did you read Mr. Hochman's report

3 before finalizing your report?

4 A. No, I did not.

5 Q. The first time you had read it was after 10:34:03

6 you had finalized your report?

7 A. Correct.

8 Q. But you had conversations with him before

9 you finalized your report?

10 A. Yes, I did. 10:34:12

11 Q. How long were those conversations in

12 total?

13 A. Hours. I don't know how long.

14 Q. So --

15 A. Specifically. 10:34:19

16 Q. Less than or more than five hours,

17 roughly?

18 A. Probably less than five hours.

19 Q. Okay. And those were all before you

20 served your report? 10:34:28

21 A. Yes. I had -- I have also had a

22 conversation with him since I've served my report.

23 Q. One conversation?

24 A. Yes.

25 Q. What was it about? 10:34:38

1 A. It was about refreshing my recollection 10:34:39
2 on his opinions as it relates to incremental costs
3 and conversion tracking.
4 Those were two. I think that there might
5 be other things that were -- that we discussed. 10:35:09
6 But those were two things.
7 Q. How long was the conversation?
8 A. Probably about an hour.
9 Q. When?
10 A. It was after I served my report. I 10:35:16
11 can't -- I can't remember exactly when, but...
12 Q. Was it in the last week?
13 A. Probably was within the last week.
14 Q. Was it in the last 48 hours?
15 A. No, I don't so. 10:35:28
16 Q. Were their lawyers on the call?
17 A. Yes.
18 Q. Who was on the call?
19 A. Mr. Lee was on the call.
20 Q. Did he speak? 10:35:40
21 A. Yes.
22 Q. So you and Mr. Lee and Mr. Hochman talked
23 about refreshing your recollection on Mr. Hochman's
24 opinion about incremental costs?
25 A. Yes. 10:35:51

1 Q. And his opinions about conversion 10:35:51

2 tracking?

3 A. Correct.

4 Q. Were there any other subjects you 10:35:58

5 discussed?
6 A. Those were the primary ones. I don't
7 recall any others.

8 Q. Okay. What did he tell you about his
9 opinion on incremental costs that refreshed your
10 recollection? 10:36:06

11 A. So my opinion -- in my opinion in my
12 report, I consider one set of incremental costs,
13 traffic acquisitions costs.

14 I have also looked at the other costs
15 that have been provided on some of the financial 10:36:41
16 statements related to the various areas of damages
17 that I'm looking at. And I -- and I discussed with
18 him those other costs and whether or not they would
19 be incremental.

20 Q. So take a look at Footnote 156 of your 10:37:23
21 report.

22 A. Yes.

23 Q. I believe this is the only part of your
24 report that discusses the incremental costs
25 associated with the alleged wrongful conduct. 10:37:57

1 Just assume for the moment that I'm right 10:38:02
2 about that.

3 Did your conversation with Mr. Hochman
4 involve a discussion of incremental costs other
5 than what's discussed in this footnote? 10:38:17

6 MR. LEE: Objection. Mischaracterizes
7 the footnote.

8 THE DEPONENT: Well, I believe that this
9 footnote embodies what I talked about just now as
10 well with him. 10:38:54

11 Q. (By Mr. Santacana) Okay. I think you
12 just said, in response to question before that,
13 that you've "looked at the other costs that have
14 been provided on some of the financial statements
15 related to the various areas of damages that I'm 10:39:06
16 looking at"?

17 A. Yes.

18 Q. And that you discussed "those other costs
19 and whether or not they would be incremental" with
20 Mr. Hochman? 10:39:16

21 A. That is accurate, yes.

22 Q. When you say "other costs that have been
23 provided on some of the financial statements," are
24 you referring to the financial statements that you
25 reviewed before serving your report? 10:39:28

1 A. Yes. 10:39:31

2 Q. Did you express an opinion as to whether
3 those cost were or were not incremental in your
4 report?

5 A. They are -- in my opinion is that they 10:39:41
6 were not be -- that they would not be incremental.

7 Q. And which ones in particular are you
8 talking about?

9 A. Well, I would have to have the documents
10 in front of me to -- to identify those. 10:39:51

11 Q. So just so I understand, you -- go ahead.

12 A. But I do remember, for example, there
13 were engineering costs as part of those. There
14 were infrastructure or machine-related costs in
15 some of those. And I think that there were also
16 some administrative or HR costs in those. 10:40:11

17 But I cannot remember fully all of the
18 costs that were in there as I sit here today.

19 Q. Did you discuss engineering costs,
20 infrastructure or machine-related costs, and
21 administrative or HR costs with Mr. Hochman after
22 serving your report in the conversation we've been
23 discussing?

24 A. Well, I don't recall specifically if it
25 was after serving my report. Certainly before 10:40:41

1 serving my report. 10:40:46

2 Q. So -- sorry. I'm focused on the

3 conversation where your recollection was refreshed

4 as to his opinion on incremental cost.

5 And so keeping that conversation in 10:40:57

6 mind --

7 A. Which -- which? No. Start over.

8 Which conversation are we talking about?

9 Q. I'm keeping in mind the conversation you

10 had with Mr. Hochman after you served your report. 10:41:07

11 A. Okay.

12 Q. Which refreshed your recollection as to

13 his opinion on incremental costs.

14 You with me so far?

15 A. Yes. 10:41:17

16 Q. Okay. So keeping that conversation in

17 mind, which specific costs did you discuss with

18 Mr. Hochman and whether or not they qualify as

19 incremental costs?

20 MR. LEE: In that conversation. 10:41:28

21 THE DEPONENT: In that conversation.

22 MR. LEE: He's accepting that you've had

23 prior conversations, and this refreshes it. But

24 he's limiting his question to the -- the

25 conversation you had after the -- the report was -- 10:41:36

1 MR. SANTACANA: Right. Your most recent 10:41:39
2 conversation.

3 THE DEPONENT: I am not sure that I'll 10:41:45
4 remember all of it. But what I can remember as I
5 sit here is, as it relates to their, what I'll
6 call, infrastructure costs -- meaning Google's
7 infrastructure costs -- he indicated to me, and it
8 makes sense, that there would be no incremental
9 infrastructure costs as it relates to the damages
10 in this -- the damages in this matter. 10:42:11

11 Q. (By Mr. Santacana) Okay. And what did
12 Mr. Lee say about incremental costs during the
13 conversation?

14 A. I don't recall Mr. Lee saying anything
15 about that. 10:42:27

16 Q. Okay.

17 A. During the conversation.

18 Q. And then you said that he also refreshed
19 your recollection as to his opinion on conversion
20 tracking? 10:42:34

21 A. Yes.

22 MR. LEE: For the record, Mr. Santacana
23 means Mr. Hochman, not Mr. Lee.

24 MR. SANTACANA: Mr. Hochman.
25 Mr. Hochman. 10:42:43

1 Q. (By Mr. Santacana) What did he tell you 10:42:46
2 about conversion tracking during your most recent
3 conversation, Mr. Hochman?

4 A. Well -- well, generally, he refreshed my 10:43:11
5 recollection on our earlier conversations on how
6 the information gathered by Google that relates to
7 conversion tracking is collected and then used by
8 Google in its algorithms and machine learning
9 techniques that ultimately go into its -- its
10 bidding, its automated bidding process that it 10:43:46
11 provides to advertisers.

12 Q. What is the automated bidding process
13 that you're referring to?

14 A. Well, I think we are starting to get into 10:44:09
15 a technical area here.

16 I understand that there are certain
17 situations where if -- if an ad is requested, there
18 would be automated bids, an automated bidding
19 process, such that advertisers can bid for the ad
20 in an automated fashion to actually serve the ad in 10:44:28
21 an automated fashion.

22 Q. And what does it mean for a bid to be
23 automated as opposed to not automated?

24 A. Well, my understanding is that there is
25 an automation -- again, this is getting into a 10:44:41

1 technical area. 10:44:42

2 But my understanding is that there is
3 something called a manual bidding process, where
4 you can manually bid for ad -- where an advertiser
5 can manually -- manually bid for ads -- ad 10:44:50
6 placement, I should say -- versus automated.

7 Q. So would you say that this -- I guess you
8 were speaking to Mr. Hochman because you're not
9 really an expert on this particular subject?

10 A. I'm not a technical expert in this case. 10:45:06
11 That is correct.

12 Q. Well, I know you're not a technical
13 expert. But right now, we're talking about
14 advertisers' bidding processes. So I just -- is
15 that a subject that you are an expert in? 10:45:16

16 A. I -- I would say that I have familiarity
17 with it up to the point of being able to calculate
18 damages.

19 So I'm not an expert in the technology,
20 but I am expert -- I have enough familiarity to 10:45:30
21 calculate damages for those types of cases, for
22 these types of cases.

23 Q. Has there been another expert engagement
24 in which you have calculated damages based on
25 automated advertisement bidding processes on the 10:45:45

1 Internet? 10:45:51

2 A. What was that last part? I didn't hear

3 the last part of your question.

4 Q. On the Internet?

5 A. Yes. 10:45:56

6 Q. Which case?

7 A. Brown.

8 Q. Has there been any other?

9 A. Not that I can recall, no.

10 Q. How did you become familiar with 10:46:02

11 automated bidding such that you could opine on

12 damages?

13 A. Through my work in -- in this case, as

14 well as my work in the Brown case, and my

15 discussions with the technical experts. 10:46:15

16 Q. Before you were retained in Brown, did

17 you have any familiarity with the automated bidding

18 process such that you could calculate damages?

19 A. I never attempted to. But I had heard --

20 I had heard of and read information on the 10:46:42

21 automated bidding process up until then. But I had

22 never attempted to, so I don't know if I could have

23 or couldn't have.

24 Q. You mentioned manual bidding. Can you

25 tell me what that is? 10:46:56

1 A. So my understanding is that that allows 10:46:57
2 manual bidding -- again, this is a technical
3 expert -- a technical area, and I'm not a technical
4 expert in this case.

5 But my understanding is that allows -- 10:47:09
6 manual bidding allows an advertiser to set a bid
7 price in a manual -- set a price for their ad in a
8 manual fashion versus an automated fashion.

9 Q. In a situation where an advertiser is
10 engaging in manual bidding, is it your 10:47:47
11 understanding that they are bidding on a particular
12 performance metric for the ad?

13 A. I don't think I have an understanding of
14 that -- how that -- how that works in that much
15 detail. 10:48:03

16 Q. What is the bid that is manual in your
17 example? What is it for?

18 A. Well, my understanding is that you would
19 be bidding for an ad placement to place an ad.

20 Q. What is it called a "bid" as opposed to a 10:48:17
21 "price"?

22 A. Well, my -- my understanding is that
23 you -- from a bidding standpoint that there are
24 multiple potential advertisers that could actually
25 place the ad. And so one is placing an ad in a 10:48:33

1 potentially competitive situation. 10:48:41

2 Q. And how do you understand the bid to be
3 expressed in monetary terms?

4 A. I -- this is beyond my technical
5 understanding of how that -- how that works. 10:48:56

6 Q. Fair enough.

7 So suffice it to say, though, the bid
8 that the advertiser is placing, whether it's manual
9 or automated, your understanding is that that is in
10 exchange for the placing of ads? 10:49:09

11 A. That's roughly my understanding, yes.

12 Again, I'm not the technical expert here.

13 Q. Apart from your work with Mr. Hochman and
14 your work on these cases -- well, actually, let me
15 start over. 10:49:31

16 Why don't you tell me, what is the basis
17 of your understanding of the testimony you just
18 gave about the automated and manual bidding
19 processes?

20 A. It's reading the documents and here in my 10:49:40
21 discussion with Hochman.

22 Q. Reading the documents that were produced
23 in this case?

24 A. Correct.

25 Q. Does it also include reading the 10:49:47

1 documents produced in the Brown case? 10:49:49

2 A. I don't -- I don't -- I mean, if I did

3 learn something in the Brown case that I couldn't

4 forget, there's potential -- that that potentially

5 could be part of my memory as to how this -- how 10:50:01

6 this works.

7 But, certainly, I didn't use any Brown

8 documents in my calculations here that were not

9 also -- there were some overlaps. So there were

10 some documents produced in this case as well as the 10:50:17

11 Brown case.

12 Q. Right. Of course. And I understand that

13 you're only human.

14 My question is just, your understanding

15 of the automated bidding process that you've been 10:50:24

16 talking about, did that come from documents in this

17 case, or both documents in this case and in this

18 other case?

19 A. I -- I don't recall as I sit here.

20 Q. Other than documents, litigation 10:50:41

21 documents, produced by Google, your understanding

22 of the automated bidding process, is it based on

23 anything else?

24 A. Well, I did do publicly -- public

25 research. 10:50:53

1 Q. Okay. 10:50:53

2 A. But I don't recall if anything came in
3 through public research on that particular topic.

4 Q. What do you mean, "if anything came in
5 through public research"? 10:51:00

6 A. That -- that would influence my opinion
7 on the subject that we've just been talking about.

8 Q. If it did, would you have cited it in
9 your report?

10 A. If -- yeah, if there -- if there was 10:51:16
11 information that I relied upon that is public, I
12 cited it in my report.

13 Q. Okay. And then you said, in addition to
14 documents from the litigation, potentially public
15 research if you cited it in your report, also your 10:51:32
16 basis of your understanding comes from Hochman?

17 A. Correct.

18 Q. Okay.

19 (Discussion off the stenographic record.)

20 MR. LEE: Eduardo, do you mind just 10:51:48
21 keeping your voice a little up.

22 THE DEPONENT: Sure.

23 MR. LEE: It's hard to hear.

24 Q. (By Mr. Santacana) And just to put a
25 fine point on it: The understanding that comes 10:52:01

1 from Hochman with respect to the automated bidding 10:52:03
2 process, that's from your conversations with him
3 before you finalized your report, correct?
4 A. Correct.
5 Q. It is not from his report? 10:52:12
6 A. That is correct.
7 Q. What about more generally the market
8 dynamics of the online advertising industry? You
9 talk about that a little bit in your report.
10 What's the basis of your understanding of 10:52:32
11 that?
12 A. The basis of my understanding of that is
13 twofold: I've had cases, litigation, patent
14 infringement cases, in the online advertising
15 space; plus I've also helped companies license 10:53:07
16 patents in the online advertising space.
17 I should say online and mobile space,
18 generally.
19 Q. Sure. And I include mobile and online
20 for -- at least for purposes of today. 10:53:33
21 Your reference to litigation patent
22 infringement cases, in those cases, you were
23 providing damages analyses relating to patent
24 infringement in the online advertising space?
25 A. Yes. 10:53:48

1 Q. And those analyses included licensing 10:53:48

2 analysis?

3 A. Those -- in those cases, as best -- the
4 best of my recollection, related to a reasonable
5 royalty.

10:54:09

6 Q. Okay. And do you happen to recall which
7 cases those are?

8 A. I do not as sit here. I could look at my
9 CV to try to see if I could -- if any of them
10 actually went all the way to deposition and/or 10:54:22
11 trial.

12 Q. Do you recall ever testifying about the
13 online advertising industry?

14 There's an Amazon IRS case, but I think
15 that's a tax case? 10:55:30

16 MR. LEE: Is that a new question, or do
17 you want him to answer the first question?

18 MR. SANTACANA: Just helping him.

19 MR. LEE: Not a question at all?

20 THE DEPONENT: As I'm sitting here, I 10:55:37
21 don't see any case that's gone to -- at least
22 deposition.

23 As it relates to that, that Amazon case
24 is a tax case.

25 Q. (By Mr. Santacana) Okay. So you've 10:55:49

1 looked at your expert testimony disclosure here. 10:55:50

2 You don't see any online advertising space cases
3 that made it to deposition or trial?

4 A. Correct.

5 Q. You've issued reports in such cases? 10:56:02

6 A. I don't think so. I don't think it's
7 gone all the way to a report.

8 Q. Okay. And so far, we've been talking
9 about the patent infringement cases. You also
10 mentioned that you have helped companies with
11 licensing in the online advertising space? 10:56:18

12 A. Yes.

13 Q. That was a consulting-type arrangement?

14 A. Correct.

15 Q. For licensing patents relating to online
16 advertising? 10:56:28

17 A. Correct.

18 Q. Got it.

19 Again asking about the market dynamics in
20 the online advertising space, apart from the
21 consulting you did in patent infringement cases and
22 to help companies license patents, is there any
23 other basis for your understanding of the market
24 dynamics of the online advertising space? 10:56:46

25 A. Not beyond what I've already talked about 10:57:05

1 in my previous testimony here today. 10:57:08

2 Q. Relating to the automated bidding
3 process?

4 A. Well, related to my research.

5 Q. Right. 10:57:20

6 A. And preparation of my current report as
7 well as my Brown report.

8 Q. Did you discuss the market dynamics of
9 the online advertising industry with Mr. Hochman
10 before finalizing your report? 10:57:32

11 MR. LEE: Objection. Vague.

12 THE DEPONENT: As I sit here, I'm not
13 recalling specifically speaking about that, but it
14 may have come into our discussions.

15 Q. (By Mr. Santacana) You're aware that 10:58:28
16 Christopher Knittel's expert report discusses the
17 market dynamics of advertising in mobile apps,
18 right?

19 A. Well, I have read his report. So I'm
20 aware of what he talks about in his report. 10:58:45

21 Q. And you're aware that's one subject he
22 discusses?

23 A. He -- yes, he does.

24 Q. Would you consider yourself an expert in
25 that area, the market dynamics of advertising in 10:58:55

1 mobile apps? 10:58:58

2 A. I would consider myself an economic

3 expert that has the ability to look at the

4 information here and provide an appropriate

5 opinion. 10:59:16

6 To the extent that that requires

7 consideration of the documents that look at the

8 market dynamics of the industry, yes, I'm -- I'm

9 fully an expert to that level.

10 But I don't hold myself as an expert and 10:59:31

11 I don't -- don't do consulting in that field.

12 Q. I'm having a little trouble parsing your

13 answer.

14 What is the difference between

15 considering yourself an economic expert with the 10:59:48

16 ability to look at the information here and provide

17 an opinion on the one hand; and, on the other hand,

18 holding yourself out as an expert in the field?

19 A. Well, I don't -- I do not provide

20 companies -- I do not provide companies with -- or 11:00:04

21 do not hold myself out to provide companies with

22 consulting or strategy as it relates to the market

23 dynamics as you were discussing them.

24 I do provide economic analyses as it

25 relates to damages in this case or licensing in 11:00:22

1 other cases that relate to -- that have related to 11:00:30
2 this field.

3 Q. Do you see the damages calculations you
4 did in this case analogous to licensing opinions
5 you have issued in other cases in any way? 11:00:42

6 A. Could you repeat that?

7 Q. Do you see the damages opinion that you
8 have given in this case analogous in any way to the
9 licensing opinions you've given in other cases?

10 A. Certainly from a -- certainly from a 11:01:30
11 methodology standpoint, there are certain areas
12 that are analogous.

13 Q. What are those --

14 A. Well, in cal- -- in licensing, one looks
15 at the profitability of products and isolates the 11:01:50
16 profitability of products, as I've done here in the
17 unjust enrichment case. One looks at comparables
18 as I've done here in parts of my reports -- part of
19 my report as well.

20 Q. By "comparables," you're referring to, 11:02:11
21 for example, other market transactions for data as
22 you describe them in your actual damages opinion?

23 A. That -- that is in part correct, yes.

24 Q. Is the structure of your actual damages
25 opinion with respect to its consideration of what a 11:02:27

1 user would be willing to give up certain data for, 11:02:32

2 is that, in your mind, analogous to the

3 hypothetical negotiation structure for a reasonable

4 royalty?

5 A. No, it's not -- it's not analogous to 11:02:48

6 that. That's a different -- that's a different

7 analysis.

8 Q. As I read your actual damages opinion,

9 you do seem to be imagining some type of

10 hypothetical negotiation; is that fair to say? 11:03:10

11 MR. LEE: Objection. Form.

12 THE DEPONENT: I'm -- no, I don't know.

13 I -- I wouldn't call it a "hypothetical

14 negotiation."

15 Q. (By Mr. Santacana) Why not? 11:03:25

16 A. Because what I'm doing is calculating the

17 fair -- the fair market value -- the fair value

18 based on a market transaction.

19 I don't -- I'm not imaging a hypothetical

20 negotiation, if you would, like one does in a

21 patent infringement case.

22 Q. Okay. I understand.

23 How many expert reports have you issued

24 related to consumer privacy damages -- consumer

25 privacy damages? 11:04:11

1 A. Two, if you -- this one as well as Brown. 11:04:17
2 Q. Before that, you'd never done it before?
3 A. I don't -- I don't believe I had issued
4 an expert report on consumer privacy damages, no.
5 Q. Have you ever testified as to consumer 11:04:31
6 privacy damages other than right now and in Brown?
7 A. I do not believe so, no.
8 Q. Have you ever been retained to consult
9 with any company or other entity on the subject of
10 consumer privacy? 11:04:54
11 A. I don't recall being retained in any case
12 like that -- other case like that.
13 Q. Before you were retained in Brown, had
14 you ever before issued an expert opinion of any
15 kind as to the value of consumers' online activity 11:05:19
16 data?
17 A. Could you repeat that? I want to make
18 sure I answer that correctly.
19 Q. I'm going to try to make it less of a
20 mouthful. 11:05:35
21 Before you were retained in Brown, had
22 you ever issued an expert opinion of any kind as to
23 the value of consumer data?
24 A. Not -- no, not an expert -- I have not
25 issued an expert report on the value of consumer 11:06:01

1 data. 11:06:03

2 Q. Or provided expert opinion on that
3 subject?

4 A. I have not provided expert opinion on
5 that subject. I have consulted on transactions 11:06:10
6 related to that subject.

7 Q. What do you mean?

8 A. I worked on transactions where companies
9 were acquired for access. And my understanding of
10 the acquisition was that it was related -- or that 11:06:42
11 it related to the data that was being acquired.

12 MR. LEE: Just one second. I didn't
13 represent to you in any of that work, so I don't
14 know --

15 THE DEPONENT: Yes. 11:06:59

16 MR. LEE: -- but to the extent any of
17 that work is governed by confidentiality agreements
18 or protective orders, I just want to be mindful of
19 that. Okay?

20 THE DEPONENT: Yeah. I'm not going to be 11:07:06
21 able to say anything about that, because it is all
22 governed by...

23 MR. LEE: I think you're fine now.

24 THE DEPONENT: Yeah.

25 MR. LEE: But I just want to issue that 11:07:13

1 warning, because I don't know -- I don't know what 11:07:14

2 governs.

3 Q. (By Mr. Santacana) So just to clarify, 11:07:22
4 you said you have worked on transactions where the
5 companies were acquired because the acquiring
6 company wanted that -- the acquired company's data?

7 A. Correct.

8 Q. And the data in question was consumer
9 data?

10 A. That is my recollection, yes. 11:07:37

11 Q. Was it online data or some other type of
12 data?

13 A. I really don't feel like I can go any
14 further than that.

15 Q. Why? 11:07:46

16 A. Because these are all -- these are all --
17 my case that I work on or my matter that I worked
18 is confidential, and so I'm not at liberty to say.

19 Q. Well, I think you can tell me whether it
20 was online data or not. I'm not sure that 11:08:00
21 specifies any particular entity.

22 A. Well --

23 MR. LEE: You have to be comfortable with
24 that, based on --

25 THE DEPONENT: Yeah. 11:08:15

1 MR. LEE: -- your understanding of your 11:08:15
2 agreements you entered into. Obviously,
3 Mr. Santacana can't answer that for you because he
4 wasn't a party to any of that, nor was I.
5 So I think answer it if you can. But if 11:08:23
6 you don't feel comfortable, that's fine too.
7 THE DEPONENT: Yeah. At this point I
8 just don't feel comfortable.
9 MR. SANTACANA: Okay. We'll have to talk
10 about that during the break. 11:08:32
11 Q. (By Mr. Santacana) Did you -- I think
12 you said that, in those transactions, you were
13 valuing consumer data?
14 A. No, I was not.
15 Q. You were not. Were you valuing the 11:08:44
16 companies to be acquired?
17 A. Yeah. Yes.
18 Q. And part of valuing the company,
19 presumably, included valuing the value of the data
20 to be acquired? 11:08:59
21 A. Correct.
22 Q. Okay. What methodology did you use to
23 appraise the data to be acquired?
24 A. I -- I cannot say.
25 Q. Your methodology was confidential? 11:09:15

1 A. I -- my methodology -- two things: One 11:09:17
2 is I think the whole transaction is confidential;
3 my role in the transaction is confidential.
4 So I'm -- I'm not able to say any more
5 about that transaction. 11:09:33
6 Q. Okay. Well, let me ask you this: Before
7 this case and Brown, had you ever applied any
8 methodology to valuing consumer data?
9 A. You're testing the limits of my memory
10 in -- in addition to confidentiality. So I do not 11:10:01
11 recall specifically how the valuation was done in
12 that case, in that -- I shouldn't say it's a case.
13 It's a matter. It's a transaction.
14 Q. I think you said earlier that your task
15 or your goal in the actual damages opinion was to 11:10:22
16 determine the fair market value of the data that's
17 at issue in this case; is that fair?
18 A. A fair value, yes.
19 Q. Is that different from fair market value?
20 A. Yeah, I think -- I think I misspoke when 11:10:37
21 I said "fair market value." That's a defined term
22 in accounting.
23 Q. And you don't mean to assume the burden
24 of that term with respect to this opinion?
25 A. I'm not even sure that -- fair market 11:10:47

1 value is a different -- a different standard when 11:10:49
2 you're valuing a company or a transaction. And I'm
3 not -- I was not valuing a company in that -- in
4 this case.

5 Q. Does the data in question in this case 11:11:02
6 have a fair market value?

7 A. I -- that would go beyond my assignment
8 in this case, and I haven't -- I haven't determined
9 that.

10 Q. Do you have an opinion as to whether the 11:12:46
11 data at issue in this case has a fair market value?

12 A. I don't have that opinion. I have not
13 formed an opinion on that.

14 What I have calculated here is a fair
15 price to incentivize this particular group of 11:12:57
16 people, the class members, to provide access to
17 their data.

18 Q. Have you ever expressed an expert opinion
19 in any engagement as to the fair market value of
20 consumer data? 11:13:20

21 A. I don't recall doing so.

22 Q. Are you aware of any authority that would
23 suggest that there is a fair market value to
24 consumers' online data?

25 A. I am not aware of -- of any authority on 11:13:47

1 that as I sit here. 11:13:50

2 Q. Are you aware of any authority that
3 suggests how to value consumers' online data?

4 MR. LEE: Can you ask that again? I'm
5 sorry. 11:14:07

6 Q. (By Mr. Santacana) Are you aware of any
7 authority that suggests how to value consumers'
8 online data?

9 A. Not as I sit here, no.

10 Q. Is there a difference between the value 11:14:32
11 of a consumer's online data to that consumer and
12 the fair market value of the same data?

13 A. Could you repeat that?

14 Q. Is there a difference between the value 11:15:12
15 of a consumer's online data to that consumer in the
16 fair market value of the same data?

17 A. I -- that -- that -- that would be
18 something I would need to investigate. I have not
19 investigated that as part of my report.

20 Q. Can you take a look at paragraph 130? 11:15:27

21 A. Yes.

22 Q. In that paragraph, you say, "actual
23 damages can be determined as a function of the
24 payments necessary to incentivize an individual to
25 knowingly surrender the choice to keep activity on 11:15:44

1 mobile apps private and allow an organization to 11:15:47
2 track app activity data."

3 Do you see where I'm reading that?

4 A. Yes.

5 Q. How does that task of determining actual 11:15:59
6 damages differ from the task of determining the
7 fair market value of the data at issue in this
8 case?

9 MR. LEE: Under the rule of completeness,
10 I'm going to finish the rest of that paragraph. 11:16:11

11 "I have therefore identified and
12 considered various indicators of both the payments
13 that Google and other organizations have paid to
14 individuals to track their online activity and the
15 fees that individuals have paid to various 11:16:24
16 organizations in their attempt to increase online
17 privacy and/or avoid tracking."

18 I think with that full reading, you can
19 try to answer counsel's question.

20 THE DEPONENT: I -- I mean, in -- in this 11:16:55
21 case, fair -- fair market value, my understanding
22 of fair market value is that you have a willing
23 buyer and a willing seller.

24 In this case, these were not willing
25 participants. What I have done here is to try to 11:17:10

1 determine a price based on comparables that 11:17:15
2 participants have been willing to separate with
3 their data for. And so --
4 Q. (By Mr. Santacana) Why --
5 MR. LEE: Hold on. 11:17:25
6 THE DEPONENT: And so this, in my
7 opinion, is a very conservative value relative to
8 what they would have -- would have actually
9 demanded, what these participants would have
10 actually demanded. 11:17:41
11 Q. (By Mr. Santacana) Why would you use
12 comparables in which the participants were willing
13 to part with their data to determine what an
14 unwilling participant would need to be paid to part
15 with that data? 11:17:55
16 A. I think that that's a very conservative
17 view of what the actual damages would be. And
18 so -- and it's the best available information to
19 make that calculation.
20 And so I believe that it's appropriate in 11:18:14
21 this case, given the information that's available,
22 as well as my task to calculate actual damages.
23 Q. So as I understand your task, you were
24 essentially trying to determine the price at which
25 an unwilling seller of data would become a willing 11:18:39

1 seller, right? The point at -- the fulcrum at 11:18:43

2 which the person goes from no, I won't, to yes, I
3 will, right?

4 A. I think that this is -- this is a floor,
5 if you will, for what that would be. I think it 11:18:57
6 likely would be higher than this, so I think it's a
7 very conservative view of what you're asking.

8 Q. I understand you think it's a
9 conservative view.

10 When you say it's a "floor," is that 11:19:10
11 different than what I'm calling the fulcrum? It's
12 the point at which the seller goes from unwilling
13 to willing?

14 A. It's -- it's yes. I guess -- I guess
15 we're talking in similar terms. 11:19:22

16 Q. So, in essence, you are trying to imagine
17 a transaction between a willing buyer and a willing
18 seller and determining at what price the buyer and
19 the seller are both willing to buy and sell, right?

20 MR. LEE: Objection to form. 11:19:42

21 Mischaracterizes.

22 THE DEPONENT: No, I -- I don't believe
23 that that's correct.

24 Q. (By Mr. Santacana) How is that different
25 from determining the price at which the seller is 11:19:47

1 willing to sell? 11:19:50

2 A. In -- in this case, I believe that this
3 is -- we -- we do have examples of willing -- of
4 willing sellers.

5 Q. I know. 11:20:05

6 A. For -- for this particular transaction.
7 However, the -- the class is not a willing seller.
8 So I look at this as a floor.

9 Q. What do you mean --

10 A. The price -- 11:20:18

11 MR. LEE: Hold on.

12 THE DEPONENT: The price would likely be
13 higher in -- in this case.

14 MR. LEE: Just for the record, Eduardo, I
15 know you don't mean to do it, but I think 11:20:27
16 Mr. Lasinski is a very methodical speaker, so he's
17 not always finished with his answer even when
18 there's a pause.

19 So I think we should just slow it down
20 just a beat so that we're not talking over each 11:20:36
21 other.

22 Q. (By Mr. Santacana) You said in this
23 case, we have examples of willing sellers for this
24 particular transaction.

25 What did you mean by "this particular" 11:20:48

1 transaction"? 11:20:51

2 A. What I meant -- what I meant in this case
3 is the market study in which Google has paid
4 participants to access their information, in other
5 words, the Ipsos study. Google itself has paid 11:21:08
6 willing participants a certain amount of money to
7 access their -- to access their data.

8 I look -- I look at that as a floor for
9 the actual damages because the participant groups
10 are different between willing -- a willing group 11:21:32
11 and an unwilling group.

12 Q. How do you know they're different?

13 A. Because in this case -- because in this
14 case, the participants in this study have signed up
15 to provide access to -- Google access to their 11:22:03
16 data. And the class -- the class has specifically
17 indicated that it doesn't want Google to access its
18 data by turning -- turning its SWAA off. So they
19 are an unwilling participant.

20 Q. You posit that the class members in this 11:22:52
21 case who had turned WAA off would nevertheless
22 become willing sellers at a particular price,
23 namely at least \$3 per device, right?

24 A. No. What I'm -- what I'm positing is
25 that they would -- that that is a very conservative 11:23:16

1 floor for actual damages. And so that -- that 11:23:19

2 would be a floor for actual damages, a floor for
3 what that calculation would looks like.

4 Q. Have you tried to calculate actual --
5 actual damages in the case, or just tried to 11:23:35
6 calculate the floor of actual damages?

7 MR. LEE: Objection to form.

8 THE DEPONENT: I -- I think it's an
9 appropriate calculation for actual damages. I
10 think it could be higher. But it's conservative. 11:23:53

11 Q. (By Mr. Santacana) You have said that
12 it's conservative many times already today, and you
13 have called it a floor multiple times. So I'm just
14 trying to understand.

15 Was your task to calculate the floor, or 11:24:06
16 was your task to calculate the actual damages to
17 the actual class members?

18 A. My task was to calculate the actual
19 damages to the actual class members. I believe
20 I've done that in a conservative manner. 11:24:19

21 Q. What does that mean? Did you get it
22 right or not?

23 A. I do -- I do have it right, yes.

24 Q. Then why do you say it's conservative?

25 A. Because it's -- because at the end of the 11:24:33

1 day, it -- there's a potential for it to be higher. 11:24:37
2 But I believe -- but I believe, based on
3 the information that I have available to me,
4 that -- that it is the best estimate of what would
5 be appropriate in this case. 11:24:48
6 Q. All right. Is there a potential that
7 it's a lot higher?
8 MR. LEE: Objection. Form.
9 THE DEPONENT: Not that I'm aware of, no.
10 Q. (By Mr. Santacana) You're not concerned 11:24:59
11 that your actual damages opinion is grossly
12 undercompensating the class?
13 A. I am not.
14 Q. Why not?
15 A. Because I think, based on the information 11:25:13
16 available to me, that this is an appropriate
17 conservative estimate.
18 Q. I know that's what you think. That's
19 your conclusion.
20 I want to know why that's your 11:25:20
21 conclusion.
22 A. I -- I think I just answered.
23 Q. No, you didn't.
24 A. Okay. Well, I think I did.
25 Q. Why do you think it's appropriate? 11:25:28

1 A. Based on the -- 11:25:29

2 MR. LEE: Asked and answered.

3 Go ahead.

4 THE DEPONENT: Based on the information

5 that's available to me, I think that it -- that -- 11:25:34

6 that it is -- that it is appropriate.

7 Q. (By Mr. Santacana) The Ipsos study paid

8 \$3 a month?

9 A. In certain cases, yes.

10 Q. But your actual damages opinion pays \$3 11:25:47

11 just once?

12 A. That is correct.

13 Q. Why?

14 A. Because based on the information that I

15 have, I am able to determine that -- I am able to 11:26:08

16 determine the number of devices that had SWAA off

17 at at least a given point in time.

18 I am not able to determine with certainty

19 that it had SWAA off for -- SWAA off and

20 actually -- and actually met with other 11:26:49

21 requirements for the damages calculation, such as

22 hitting third-party sites with Google trackers on

23 them, after that initial calculation -- after that

24 addition SWAA-off calculation.

25 Q. If you had proof as to which class 11:27:18

1 members hit third-party sites with the Google 11:27:25
2 trackers on them, as you say, and when and how many
3 times, would that change your actual damages
4 opinion?

5 A. Well, my understanding is that 11:27:39
6 information has been deleted, so it's not
7 available. So I don't --

8 Q. Let's assume that it's available.

9 Would that change your opinion?

10 A. I -- I don't know, because I don't have 11:27:48
11 that --

12 MR. LEE: Are you representing that
13 you'll -- you're going to make data available that
14 you've previously represented was deleted?

15 MR. SANTACANA: James. 11:27:55

16 MR. LEE: I'm just trying to understand
17 your question.

18 Q. (By Mr. Santacana) My question is,
19 assume the data's available. Would that change
20 your actual damages opinion? 11:28:02

21 MR. LEE: Are you making that
22 representation or not?

23 MR. SANTACANA: I'm not answering your
24 question, James. It's not my deposition.

25 MR. LEE: I'll take that as a no. 11:28:09

1 THE DEPONENT: So I don't -- I don't have 11:28:11
2 that information, so I don't know if it would
3 change it. I can't know unless I had that
4 information.

5 Q. (By Mr. Santacana) Well, I asked you why 11:28:20
6 you assigned \$3 per device rather than \$3 per
7 month, and you said because you were missing data
8 on whether a particular device actually went to
9 third-party sites.

10 And my question is, if you knew whether 11:28:34
11 they had actually gone to third-parties sites and
12 you knew how often and when, then would it be \$3
13 per month or some other calculation, or would it
14 still just be \$3 per device?

15 A. I don't know because I don't have that 11:28:48
16 information. I would have to look at it, study it,
17 and analyze it with all the other factors of the
18 case. And since I don't have it, I can't answer
19 that question.

20 Q. Then why do you say that that information 11:28:58
21 is the reason why you have opined that actual
22 damages is the \$3 once not \$3 per month or \$3 per
23 something else?

24 A. You -- because you asked that question.
25 Again, I don't know -- I don't know the answer, and 11:29:17

1 I won't know the answer until I get -- unless I got 11:29:19
2 the information.

3 Q. Is the Ipsos --

4 A. But that's -- but that's -- that's a
5 potential reason why. But I can't answer it in any 11:29:27
6 more detail than I have.

7 Q. Is the Ipsos study comparable to the
8 transaction you're imagining in paragraph 130?

9 MR. LEE: Objection to the use of -- the
10 continued use of "imagined." 11:29:45

11 Q. (By Mr. Santacana) Hypothesizing. I
12 don't mean to say it's make believe.

13 A. I believe that the Ipsos study provides
14 the best data point --

15 Q. Is it comparable -- 11:30:01

16 A. -- for --

17 MR. LEE: Hold on.

18 A. -- provides the best data point for a --
19 for the actual damages calculation.

20 Q. (By Mr. Santacana) Is it comparable? 11:30:11

21 A. Yes, it is sufficiently comparable for
22 what I'm using it for. Yes.

23 Q. Then why did you change the payment from
24 \$3 per month to \$3 per device?

25 Actually, let me strike that for a 11:30:27

1 second. 11:30:29

2 You're aware that Google has records of
3 when devices -- when users had WAA on and WAA off?

4 A. Yes.

5 Q. And for how long? 11:30:38

6 A. Yes.

7 Q. So you could, for example, calculate
8 number of SWAA-off months for each user, right?

9 A. I did do that, yes.

10 Q. You did do that. 11:30:49

11 So why didn't you pay them per SWAA-off
12 month in your actual damages opinion?

13 A. I mean, ultimately, I thought it was more
14 appropriate and -- and conservative to do it -- to
15 do a one-time calculation based on the information 11:31:02
16 that I had available to me.

17 Q. Why was it more appropriate to do a
18 one-time calculation?

19 MR. LEE: Asked and answered.

20 THE DEPONENT: Yeah. 11:31:16

21 MR. LEE: Go ahead and answer it again if
22 you want.

23 THE DEPONENT: Again, even if I -- even
24 if I had SWAA-off months, that wouldn't necessarily
25 tell me whether or not, technically -- technically, 11:31:28

1 if they hit a third-party site with Google track -- 11:31:37
2 with a Google tracker on it.
3 And so in this case, to be, as I've said
4 in the past, appropriate and conservative, I did
5 it -- I calculated a one-time payment per device. 11:31:52
6 Q. (By Mr. Santacana) And why would you pay
7 a SWAA-off device if they never hit a third-party
8 tracker site at all?
9 A. I think it's unlikely that a
10 third-party -- that -- it's unlikely that a third 11:32:16
11 party -- that a SWAA-off device would not hit a
12 third-party tracker. It's -- it's very likely that
13 it would based on usage as well as the amount of
14 trackers that are out there.
15 Q. You would agree that different people 11:32:36
16 would hit third-party trackers different amounts
17 depending on their usage patterns?
18 A. That may be -- that may be accurate.
19 Q. It may be accurate?
20 You think it's possible that every member 11:32:58
21 of the class has hit the exact same number of
22 third-party trackers?
23 A. No.
24 Q. Okay. So it is accurate?
25 A. It is -- that is accurate. 11:33:05

1 Q. Okay. So is it fair to say, then, that 11:33:06
2 your actual damages opinion is that each device
3 should be compensated \$3 once because it is
4 extremely unlikely -- excuse me -- it is extremely
5 likely that they were exposed to the allegedly 11:33:30
6 wrongful conduct at least once?

7 A. Yes.

8 Q. What if they were exposed to the
9 allegedly wrongful conduct a thousand times? How
10 could their actual damages only be \$3, but somebody 11:33:44
11 who is exposed once also has damage of \$3?

12 MR. LEE: Asked and answered.

13 Go ahead and answer it again.

14 THE DEPONENT: I -- again, I don't think
15 that you could calculate with certainty which 11:34:04
16 member, based on the data available to me, would
17 hit it once or a thousand times.

18 I think to incentivize someone to give up
19 their information, whether it's once or a thousand
20 times, you would have to pay them. 11:34:23

21 And so...

22 Q. (By Mr. Santacana) A nonzero amount?

23 A. You -- you would have to pay them. And
24 in my opinion, a fair price -- a fair value for
25 that is \$3. 11:34:37

1 Q. And is that fair value regardless of the 11:34:39
2 amount of data in question?

3 A. Yeah, in this case, I think -- I think
4 that a uniform amount per device is appropriate.

5 Yes. 11:35:00

6 Q. Why?

7 MR. LEE: Asked and answered.

8 Go ahead.

9 THE DEPONENT: Well, for example, the --
10 the Ipsos study, that's what they pay. They -- 11:35:10
11 they pay a user \$3 per device per month, no matter
12 how much usage.

13 There -- there certainly is difference --
14 differences between Ipsos users, but they are not
15 getting compensated differently per device. 11:35:29

16 Q. (By Mr. Santacana) They're not. That's
17 true.

18 How do you know that the \$3 per month is
19 not grossly over-incentivizing users in order to
20 get a representative sample into the survey? 11:35:42

21 A. If -- based on -- based on a market
22 transaction or a comparable of what -- what needs
23 to be paid to get someone to provide their
24 information, that price -- the \$3 -- is set not
25 only based -- not only based on the Ipsos study, 11:36:37

1 but there are other studies that are out there 11:36:39
2 that -- for example, that I talk about in my report
3 that actually provide more value than three
4 bucks -- \$3 per device.

5 So it's not only the Ipsos study in which 11:36:52
6 Google has actually paid users, but there are other
7 studies that pay more per device than \$3. So I
8 think \$3 is an appropriate and a conservative
9 amount for actual damages.

10 MR. LEE: We've been going about an hour. 11:37:12

11 MR. SANTACANA: I have a couple more on
12 the Ipsos study, and then --

13 MR. LEE: Okay.

14 MR. SANTACANA: -- we'll switch to a
15 different subject and -- 11:37:18

16 MR. LEE: Sure.

17 MR. SANTACANA: -- we can take a break
18 first.

19 Q. (By Mr. Santacana) Are you opining in
20 this case that none of the participants in the 11:37:24
21 Ipsos study would have accepted less than \$3 to
22 participate?

23 MR. LEE: Objection to form.

24 THE DEPONENT: Well, certainly none of
25 the -- none of the participants did accept less. 11:37:43

1 In fact, they got significantly more than \$3. 11:37:46

2 Q. (By Mr. Santacana) They weren't
3 negotiating one-on-one with Google to participate
4 in the study, right? They were just offered a
5 one-size-fits-all amount? 11:37:57

6 A. That is correct. But their -- their
7 compensation was significantly higher than \$3.

8 Q. It was \$3 per month?

9 A. Plus, on top of that, they got paid for
10 their other devices, plus potentially a bonus, plus 11:38:10
11 a sign-up fee, plus they got a router.

12 So there was significantly more
13 compensation.

14 Q. So back to my question.

15 Are you opining in this case that none of 11:38:24
16 the participants in the Ipsos study would have
17 accepted less than \$3 to participate, had that been
18 offered, per month?

19 MR. LEE: Calls for speculation.

20 THE DEPONENT: I have not formed that 11:38:39
21 opinion, no.

22 Q. (By Mr. Santacana) Then how do you know
23 that it's comparable to the opinion you did form
24 with respect to the incentivization required to get
25 a class member to give up the data in question in 11:38:49

1 this case? 11:38:51

2 A. Because -- because in that -- what was --

3 a market transaction such as this, plus the other

4 information that I discussed in my report that

5 actually is higher per device, plus incentivize -- 11:39:03

plus, as you said, incentivizing a variety of folks

7 to actually sign up to the study, plus the fact

8 that they're willing participants as opposed to the

9 class, which would be unwilling, I think \$3 is an

10 appropriate price. 11:39:27

11 I don't think it gross -- would be

12 grossly overstating a price. That would be

13 appropriate.

14 Q. I appreciate your answer, but my question

15 was a little bit different. 11:39:37

16 The question was: How do you know that

the Ipsos study's payments are comparable to the

opinion you formed in this case with respect to the

incentive required to get a class member to give up

20 their data if you do not know whether the 11:39:54

participants in the Ipsos study would have accepted

22 less money?

A. I don't believe that it -- I believe that

there is a chance that they would have accepted --

1 But I think overall, to get it -- Google, 11:40:16
2 as indicated, to get a fair sample or
3 representative sample, that this is the
4 compensation, that this is the compensation that is
5 necessary to actually incent users. 11:40:28
6 It's greater than the \$3 that we talked
7 about. It's not just the \$3. It's -- it's more
8 than that.
9 And in this case, I calculated an
10 appropriate amount for unwilling participants. So 11:40:44
11 I think that that's -- it's the right amount.
12 Q. Why should the price paid to the
13 unwilling participants be lower than the price paid
14 to the Ipsos participants?
15 A. Well, at the end of the day, I'm using 11:41:06
16 that as a comparable. It's -- it ultimately is the
17 same amount. It's the same amount per device.
18 Q. But, it's a lot less, right? Because
19 Ipsos is per month, and this is one time.
20 So my question is, why do you propose to 11:41:20
21 pay this class less money than Google pays Ipsos
22 participants?
23 A. I think -- as I said before, I think that
24 that's a conservative value --
25 Q. I know -- 11:41:32

1 A. -- to get them to sign up. 11:41:32

2 MR. LEE: Hold on.

3 THE DEPONENT: To get --

4 MR. LEE: Please let him finish.

5 THE DEPONENT: To get them to sign up. 11:41:33

6 Q. (By Mr. Santacana) I know the number is
7 lower, which I think is what you mean by
8 "conservative."

9 My question is why should be lower or not
10 equal or higher? 11:41:44

11 MR. LEE: Asked and answered.

12 THE DEPONENT: I don't -- I don't have
13 another answer besides what I have said before.

14 Q. (By Mr. Santacana) Is the data
15 worthless? 11:41:55

16 A. No, the data -- in my opinion, the data
17 would not be worthless.

18 Q. Is the seller in question more willing
19 than the Ipsos participants?

20 A. No, they are not. 11:42:07

21 Q. Were the sellers in question aware of the
22 data being taken?

23 A. My understanding is that they're not
24 aware of it being taken -- that it was taken.

25 Q. Can you name any factor that would weigh 11:42:20

1 in favor of lowering the Ipsos payment in this 11:42:23
2 case?

3 MR. LEE: Objection. Mischaracterizes
4 Ipsos.

5 THE DEPONENT: Yeah, I don't -- I don't 11:42:33
6 think I'm lowering the Ipsos payment. It is \$3 --
7 it is \$3 per device. And, in fact, you can get \$3
8 per device per month.

9 But I think that that's an appropriate
10 amount, a conservative amount, for this case. 11:42:45

11 Q. (By Mr. Santacana) You said earlier that
12 a participant in Ipsos would get more money for
13 data than a class member in this case. You are
14 setting a conservative floor of \$3 one time, not \$3
15 every month, right? 11:43:01

16 A. That is how the calculation works. That
17 is correct.

18 Q. Okay. Can you name any factor that went
19 into your calculation that weighed in favor of
20 lowering the total amount of money the class 11:43:14
21 members would receive as compared to the
22 participants in the Ipsos study?

23 A. At the end of the day, I -- the -- the
24 factor that I considered, we've talked about
25 already, which is, in the Ipsos study, they're 11:43:37

1 collecting data every single month based on the app 11:43:42
2 tracker that is -- the tracker that is put on their
3 phone.

4 In this case, as I've said, we know the
5 number -- we know the number of devices that would 11:43:56
6 have WAA off. We don't know for sure if that
7 information was tracked every month because we
8 don't know if it hit a third-party app with a
9 Google tracker on it.

10 MR. SANTACANA: Okay. Let's take a 11:44:28
11 break.

12 (Discussion off the stenographic record.)

13 THE VIDEOGRAPHER: This marks the end of
14 the Media No. 1. Going off the record. The time
15 is 11:44. 11:44:38

16 (Recess taken.)

17 THE VIDEOGRAPHER: This marks the
18 beginning of Media No. 2 in the deposition of
19 Michael Lasinski. We're back on record. The time
20 is 12:04. 12:05:05

21 Q. (By Mr. Santacana) Mr. Lasinski, I want
22 to talk about the WAA control for a moment.

23 What is -- and actually, really, the sWAA
24 control.

25 What are the WAA and sWAA controls, as 12:05:27

1 you understand them? 12:05:29

2 A. I talk about this in my report on.

3 Q. Where are you reading from?

4 A. In Section 6.

5 WAA relates to Web -- Web and app 12:05:59

6 activity. And that is a Google setting or activity
7 control related to Google's collection and saving
8 of the user's activity on Google sites and apps.

9 Do you want me to go future than that

10 and -- 12:06:16

11 Q. No. I can read the report.

12 A. Okay.

13 And then sWAA, I understand, is
14 supplemental Web and app activity. And that will
15 allow the collection of information on sites and 12:06:29
16 apps that partner with Google and show ads for
17 sites and apps that use Google services, including
18 data that apps share with Google: Chrome browsing
19 history, diagnostics, battery level, and that type
20 of thing. 12:06:56

21 Q. Did you write your report?

22 A. Yes.

23 Q. Every word?

24 A. I had sections that my staff wrote, but
25 then I relooked at every single word and would have 12:07:06

1 edited it if I thought -- if I thought it needed to 12:07:08
2 be edited.

3 Q. How many time did you spend writing it?

4 A. 40 hours or so.

5 Q. How much time did you spend reviewing 12:07:21
6 documents in the case?

7 A. I mean, it's really -- that's really hard
8 to say, because the whole case is about the
9 documents. So when I'm writing my report, I'm also
10 reviewing documents and stuff like that, so... 12:07:39

11 Of about 200 hours I've spent on this
12 case, probably 120 I was looking at documents, or
13 maybe more.

14 Q. Okay. Do you have an opinion as to
15 whether Google has invaded user privacy in this 12:07:57
16 case?

17 A. I --

18 Q. Let me withdraw the question and ask it a
19 different way.

20 A. Yeah. 12:08:21

21 Q. You're not rendering an expert opinion
22 here that Google has misled users, are you?

23 A. No. My -- my opinion -- my opinion is
24 that liability is found in this case, and if -- if
25 liability is found, then my damages are at issue. 12:08:39

1 So I -- I don't have an opinion one way 12:08:46
2 or another whether or not liability will be found.
3 But if liability is found, that's when my opinions,
4 I understand, come into play.
5 Q. Okay. And just to make it crystal clear, 12:08:58
6 you're not opining as to whether liability should
7 be found either?
8 A. I am not.
9 Q. In your report, you discuss contemporary
10 analogous financial analyses that you consulted in 12:09:24
11 formulating your opinions relating to unjust
12 enrichment.
13 What did you do to validate whether those
14 analyses were sufficiently analogous to be relied
15 on in this case? 12:09:46
16 A. I think you are talking about the, for
17 example, [REDACTED] [REDACTED] as well as the
18 [REDACTED] model, as well as the ads impact
19 document.
20 Q. I am. 12:10:33
21 A. Okay. Those are economic models that I
22 understand Google developed to calculate the
23 economic impact of certain privacy settings that
24 were either turned off or about to -- I should --
25 that were about to be available to users. 12:10:58

1 And I looked at -- I looked at that 12:11:03

2 information that they relied upon. I considered

3 the information that they relied upon. I

4 considered the fact that those analyses were

5 considered by multiple people within Google and 12:11:24

6 used to provide estimates for business purposes

7 within Google.

8 Q. Anything else?

9 A. I -- to be -- to be clear, I used certain
10 inputs from those documents. I don't use those 12:11:49
11 document in -- or -- or analyses in whole. I use
12 them in part.

13 And so in my calculations, I'm most
14 interested in certain aspects of those documents,
15 because I also rely upon documents that were 12:12:06
16 provided in this case in -- in the form of
17 financial -- financial data as well.

18 Q. Would you agree with me that, in order to
19 rely on the parts of those documents that you did
20 rely on, you would first need to be sure that the 12:12:34
21 methodology used to arrive at the numbers in those
22 documents was sound?

23 A. In part yes and in part no.

24 Q. Explain.

25 A. Well, so, again, I'm not using the 12:13:01

1 documents in whole. So to the extent that there's 12:13:04
2 a methodology that's part -- that's not something
3 that I'm using or relying upon, I'm not as worried
4 about that piece of the document.

5 As far as the -- the overall methodology 12:13:19
6 being reliable, those parts that I use I believe
7 are -- are reliable and I understand to be reliable
8 based on my review of the documents.

9 Q. Would you also agree with me that parts 12:13:41
10 that you did rely on would need to be analogous to
11 what you're analyzing here in order to rely on
12 them?

13 A. I don't really know what you mean by
14 "analogous."

15 I would say that they need to be 12:13:58
16 appropriate to rely upon, and that's what they are.

17 Q. Okay. Well, we can take them piece by
18 piece.

19 Let's start with paragraph 72.

20 A. Okay. 12:14:23

21 Q. And here, as you said, you identify some
22 analyses, including the [REDACTED] the
23 [REDACTED] model --

24 A. Yes.

25 Q. -- a ChromeGuard study? 12:14:37

1 A. Yes. 12:14:40

2 Q. So my first question is about this phrase
3 in the first sentence of this paragraph 72.

4 "██████████ model which separately 12:14:54
5 examined the financial impact to Google of changes
6 in a related user setting, (i.e., GAP)"?

7 A. Yes.

8 Q. What did you mean by the phrase "related
9 user setting"?

10 A. So in this case, as -- as I say, "i.e., 12:15:33
11 GAP," GAP is -- my understanding is a privacy
12 setting similar to what we're talking about here
13 with SWAA.

14 And so it's appropriate, GAP -- this GAP 12:16:00
15 analysis in this case, based on the items that I
16 took out of that analysis for my analysis, is
17 related or -- or appropriate.

18 Q. On what basis do you conclude that GAP is
19 privacy setting similar to what we are talking
20 about here with SWAA? 12:16:28

21 A. So GAP -- so GAP is a privacy setting;
22 SWAA is also a privacy setting. Both settings have
23 the ability to impact personalization of ads.

24 There are documents in the record also
25 that indicate that GAP and SWAA users have 12:17:05

1 consistent -- consistent feelings about the 12:17:19
2 trustworthiness of Google and the importance of
3 their privacy.

4 And the data points that at least the

5 [REDACTED] has, which is what I think 12:17:47
6 we're talking about here that I rely upon, would be
7 consistent with the data points of an analysis for
8 SWAA and my methodology.

9 So I think for all those reasons, it's
10 appropriate. Those -- those -- this analysis is 12:18:08
11 appropriate for me to look to.

12 Q. You mentioned that both settings have the
13 ability to impact personalization of ads. Did you
14 reach a conclusion as to how they differ as to
15 their impact on personalization of ads? 12:18:28

16 A. In -- in this case, my understanding is
17 that the use of GAP would stop the personalization
18 of -- would stop ad personalization.

19 I -- I make a calculation in my report
20 under one of the scenarios where it -- part of -- 12:19:41
21 part of the assumption for that calculation is that
22 there would be no serving of ads at all. My
23 understanding is that they would be nonpersonalized
24 ads, and so I'm able to use the information in the
25 GAP tracker because it comes -- it determines the 12:20:01

1 result of what the value of nonpersonal -- 12:20:04
2 personalized ads would be versus the value of
3 personalized ads, or the revenue generated from
4 personalized ads versus nonpersonalized ads.

5 Q. So my question was whether you reached a 12:20:28
6 conclusion as to how GAP and SWAA differ with
7 respect to their impact on personalization of ads.

8 And you answered as to your understanding
9 of GAP, I think. Feel free to elaborate though.

10 But can you now address SWAA? 12:20:46

11 MR. LEE: Objection. Vague.

12 Answer if you can.

13 THE DEPONENT: I thought that I had
14 answered that.

15 But the second half of my answer is, my 12:20:55
16 understanding is that SWAA -- my understanding is
17 that Google has represented that SWAA-off users do
18 not receive personalized ads.

19 And so in calculating my unjust
20 enrichment, I looked at -- what I was looking for 12:21:18
21 there was the relationship between personalized and
22 unpersonalized ads. And that's -- and so I use the
23 GAP tracker -- the GAP -- the GAP's relationship
24 between personalized and unpersonalized ads from a
25 revenue standpoint for my calculations. 12:21:44

1 So my starting point for sWAA was that 12:21:47
2 there was not personalized -- that they were not
3 sWAA if users were not receiving personalized ads.
4 I think I said that correctly.
5 Q. (By Mr. Santacana) Your starting point 12:22:13
6 for your unjust enrichment analysis was that sWAA
7 users did not receive personalized ads? Excuse me.
8 Let me -- strike that.
9 Your starting point for your unjust
10 enrichment analysis was that sWAA-off users did not 12:22:32
11 receive personalized ads? Or was your starting
12 point that they did but should not have?
13 A. No. My starting point for Scenario 2,
14 because this only impacts Scenario 2, is that they
15 did not receive personalized ads -- I'm sorry. 12:22:52
16 Yes. That they -- my understanding is they do not
17 receive personalized ads.
18 To the extent that they did receive
19 personalized ads and those were inappropriate, then
20 my calculations would be -- would be conservative. 12:23:09
21 I would have calculated too little unjust
22 enrichment.
23 And just to be clear, I think we're
24 talking about sWAA-off users here.
25 Q. We are. 12:23:28

1 In -- you said that was for Scenario 2. 12:23:33
2 For Scenario 1, did you assume that
3 SWAA-off users received personalized ads from
4 SWAA-off data?
5 A. No. 12:23:49
6 Q. So for neither scenario did you assume
7 that SWAA-off users were receiving personalized ads
8 that relied on SWAA-off data?
9 A. Correct.
10 Q. Then why did you measure the value of 12:24:04
11 personalization for purposes of your unjust
12 enrichment opinion?
13 A. I measured the -- to be -- to be clear, I
14 measured the value of -- I measured the relative
15 value of personalization. 12:24:20
16 And the reason that I did that was
17 because when I calculated my Scenario 2 damages, I
18 needed to deduct nonpersonalized ads from two of my
19 revenue bases, revenue bases after considering
20 traffic acquisition costs and other -- and other 12:24:51
21 apportionments. And the best data point available
22 is in this impact -- is in this [REDACTED]
23 [REDACTED]
24 And so I was making a downward adjustment
25 in my model to ensure that I only deducted revenue 12:25:08

1 from nonpersonalized ads. 12:25:13

2 Q. Why did you want to deduct revenue only

3 from nonpersonalized ads?

4 A. So under Scenario 2 -- and just I'm

5 talking about Scenario 2 here. 12:26:04

6 Q. Paragraph?

7 A. This is paragraph 75, bullet 2.

8 Under Scenario 2 -- and I just want make

9 sure we're only talking about the Scenario 2, I

10 think. 12:26:22

11 In this case, my understanding is that

12 Google would be precluded from collecting, saving

13 and using sWAA-off data WAA/sWAA-off data for

14 purposes of serving and monetizing advertisements

15 in two areas, if you will -- Ad Manager and 12:26:42

16 AdMob -- as Google could not collect or save

17 requests, impressions or clicks from the

18 corresponding users.

19 My understanding, based on Google's

20 representations, is that Google, for a sWAA-off 12:27:06

21 user, currently is only serving sWAA -- currently

22 is only serving nonpersonalized ads.

23 So if they can no longer serve ads, the

24 ads that they would not be serving now, or in -- in

25 the but-for world, would have to be -- would be 12:27:33

1 nonpersonalized. 12:27:36

2 So I needed to make sure, in my
3 calculations, that I was only accounting for its
4 inability to serve nonpersonalized ads, not its
5 inability to them serve personalized ads, because 12:27:56
6 they weren't -- or aren't serving personalized ads.

7 Q. I think I understand.

8 So in -- you're trying to measure, in
9 Scenario 2 of your unjust enrichment opinion, if,
10 in the but-for world, Google could not serve ads to 12:28:17
11 SWAA-off users at all, what is the value to Google
12 of nonpersonalized advertising?

13 That's what you were trying to determine?

14 A. That's what I determined for -- for
15 those -- for -- for that scenario. 12:28:42

16 Q. And then once you concluded the value of
17 nonpersonalized advertising, you then concluded the
18 proportion of advertising that would be SWAA-off
19 advertising. And by using those numbers together,
20 that's how you get your revenue deduction? 12:28:58

21 A. I -- yeah, I think -- yes. I mean, I
22 think that that's a correct way of looking at it.
23 I think I actually make the calculation first of
24 the total number of advertising that was available,
25 and then make the -- and then make the calculation 12:29:23

1 for what the value of a sWAA-off user -- I'm 12:29:25
2 sorry -- a sWAA-off nonpersonalized ad would be.
3 But I don't think it would matter if you
4 did it -- because math -- math wouldn't -- math
5 wouldn't change either way. 12:29:39
6 Q. So let's stick with Scenario 2 for a
7 moment.
8 I'm looking at the paragraph 116.
9 MR. LEE: Paragraph 116.
10 THE DEPONENT: Okay. 12:30:06
11 Q. (By Mr. Santacana) So just so I
12 understand, 116 means -- paragraph 116 means that
13 you are not including, or you are attempting to
14 exclude, any App Promo revenue from Scenario 2
15 because it's already covered by Scenario 1, and 12:30:20
16 Scenario 2 is additive, right?
17 A. Yes. I have not made a calculation
18 for -- I have not made a calculation for App Promo
19 for its inability to serve ads for sWAA-off users.
20 And my understanding, that is 12:30:55
21 conservative; that there are some situations under
22 sWAA -- under sWAA-off where App Promo would not be
23 able to serve ads similarly to AdMob and Ad
24 Manager. However, the data is just not available
25 to try to parse at that level. 12:31:14

1 Q. So I'm looking at Figure 38 and, I guess, 12:31:16
2 paragraph 121.

3 A. Yes.

4 Q. Actually, let's back up for a moment to 12:31:36
5 120.

6 So let me know when you've read it.

7 A. 120?

8 Q. Uh-huh.

9 MR. LEE: I think there's a figure on the 12:32:02
10 next page, Mike.

11 THE DEPONENT: Uh-huh.

12 MR. LEE: Yeah.

13 Q. (By Mr. Santacana) So at the end of it, 12:32:42
14 you say "as summarized in the figure below, the
15 previous discussed [REDACTED] [REDACTED] indicates
16 that the loss of consent for GAP causes Google to
17 generate 50.42 percent of the 'App Display' revenue
18 it would earn with such consent."

19 Do you see that?

20 A. Yes. 12:33:00

21 Q. And Figure 37 summarizes that and bolds
22 the "App Display" row.

23 A. Yes.

24 Q. So as I understand it, what you
25 understood from the [REDACTED] [REDACTED] in part, 12:33:11

1 was that when -- the GAP-off users generate roughly 12:33:16

2 half of the App Display revenue that GAP on users
3 do.

4 I think I said that wrong.

5 MR. LEE: Yeah. 12:33:32

6 Q. (By Mr. Santacana) The way you
7 understood it was that the [REDACTED] [REDACTED]
8 concluded that Google's advertising revenue for App
9 Display drops approximately 50 percent when GAP is
10 off? 12:33:55

11 A. Yes.

12 Q. And then in 121, you say you applied that
13 percentage 50.24 percent to "reflect the financial
14 impact of diminished ad relevance when WAA/swAA is
15 off." 12:34:18

16 And that is where I get confused.

17 Why are you measuring the financial
18 impact of diminished ad relevance when swAA is off?

19 A. Okay. So if -- if swAA were on -- I'm
20 trying -- I'm trying to explain this the best way I 12:34:43
21 can, and I think -- I think I understood your
22 question.

23 Q. Okay.

24 A. Right now, there are two data points in
25 the record that I'm aware of that look at 12:34:53

1 diminished ad relevance. One is the one that we 12:34:55
2 just discussed. There's also one in the ads impact
3 model that says about 52 percent.

4 There may be others, but those are two
5 that I can think of right now off the top of my 12:35:05
6 head -- my head.

7 My job in this matter is to calculate
8 what -- my job in this matter is to calculate what
9 Google's unjust enrichment is in Scenario 2.

10 That job requires, in Scenario 2, for me 12:35:27
11 to figure out what the value of the ads were that
12 they served, meaning that Google served, when SWAA
13 was off, because the assumption is that if SWAA
14 were off under Scenario 2, they could serve no ad.

15 If I just deducted the total revenue 12:35:53
16 that -- that remains as part of Scenario 2 and
17 didn't take into consideration the fact that they
18 are only able to serve SWAA-off, only able to serve
19 nonpersonalized ads, since they are only able to
20 serve nonpersonalized ads, then -- only do -- I'm 12:36:20
21 sorry -- only do serve nonpersonalized ads --
22 whether or not they are able to do something else
23 or not, they only do serve nonpersonalized ads -- I
24 want to make sure that I'm not overcounting the
25 revenue that Google lost. 12:36:38

1 Q. That is very helpful. I understand now. 12:36:43
2 So looking at Figure 38, by this point in
3 your report, you've reached a conclusion about how
4 much revenue during the class period Google earned
5 from ads served by AdMob to signed-in, sWAA-off 12:37:01
6 users, net of traffic acquisition costs, and
7 excluding overlap with App Promo, and excluding
8 revenue attributable to conversion tracking, which
9 you discuss in Scenario 1?
10 A. Correct. 12:37:27
11 Q. Did I get that right?
12 A. Yes.
13 Q. And then you reduced that --
14 A. Wait.
15 MR. LEE: Wait. 12:37:32
16 THE DEPONENT: I just want make sure.
17 Are you talking about -- you're talking about the
18 first line of -- okay. Yeah. That's where I'm at.
19 Q. (By Mr. Santacana) Then you reduced that
20 by 50.4 -- well, you reduced it by 49.78 percent? 12:37:37
21 A. I believe that that's right.
22 MR. LEE: Where are you -- I'm sorry. I
23 don't know where you're indicating, Eduardo.
24 MR. SANTACANA: Just the inverse of
25 50.42, so -- 12:38:01

1 MR. LEE: Okay. That second line. Got 12:38:01
2 it.

3 MR. SANTACANA: 49.58 percent.

4 THE DEPONENT: No. No. I think I 12:38:07
5 reduced 50.42 percent.

6 Q. (By Mr. Santacana) Okay. Because in 12:38:25
7 paragraph 120, you say loss of consent for GAP,
8 which is a stand-in for loss of personalization,
9 causes Google to generate 50.42 percent of the
10 revenue it would have earned with consent, with
11 personalization?

12 A. Right.

13 Q. Okay. So you multiply it by 50.42
14 percent, and you arrive at -- at a number?

15 A. Yes. 12:38:36

16 Q. Which is in total is 78.77 million?

17 A. Yes.

18 Q. Okay. That is very, very helpful. Thank
19 you.

20 So coming back to the -- as you said, the 12:38:48
21 job on Scenario 2, what ads are captured by this
22 first row of Figure 38, ads served by AdMob to
23 signed-in SWAA-off users that are neither App Promo
24 ads nor attributable to conversion tracking?

25 A. Correct. 12:39:20

1 Q. What ads are those? 12:39:20

2 A. Those would be -- this -- just to be

3 clear, this is a -- this is a revenue model. I

4 have never -- I don't know that I could parse it

5 out between ads that are attributable and 12:39:55

6 nonattributable to conversion tracking.

7 The revenue -- there's a portion of

8 revenue that may be attributable to conversion

9 tracking, a portion of revenue that's not

10 attributable. 12:40:06

11 So I'm looking at this on a revenue and

12 profit standpoint versus an ad-by-ad standpoint.

13 Q. And I should have asked a clearer

14 question. I understand that.

15 I guess I meant more, can you give me an 12:40:16

16 example of an ad that is included in Figure 38?

17 What type of ad would be included in Figure 38?

18 A. That would be -- I'm not -- a

19 nonpersonalized AdMob ad that -- a nonpersonalized

20 AdMob ad that did not also appear in App Promo. 12:40:58

21 Q. So essentially, all other ad -- types of

22 ad campaigns that could be run through AdMob?

23 A. Correct. I -- I believe that that is

24 correct.

25 Q. For Figure 39, which -- sorry, not Figure 12:41:37

1 39. 12:41:42

2 For Figure 41, which I believe is the
3 equivalent for Ad Manager -- first of all, is this
4 the equivalent figure for Ad Manager?

5 A. Are you talking the equivalent figure to 12:42:06
6 38?

7 Q. Yes.

8 A. To Figure 38? Yes, that's the equivalent
9 figure.

10 Q. So these would be ads that were served by 12:42:21
11 Ad Manager, not AdMob, to signed-in SWAA-off users
12 that were not App Promo ads, right?

13 A. Also App Promo. Yes. Yes.

14 My understanding, just so the record is
15 clear, is that there can be overlap based on the 12:42:43
16 data produced between App Promo and AdMob, and App
17 Promo and Ad Manager.

18 And my analyses take out that revenue
19 that would appear in both App Promo and Ad Manager
20 for the purposes of Figure 41, before we even get 12:43:09
21 to this -- before we even get to this point.

22 Q. Where are Ad Manager ads served?

23 A. Okay. So my understanding is that Ad
24 Manager ads can be served in multiple locations.
25 But to be clear, my analysis only allows for or 12:44:19

1 only looks at Ad Manager ads that are related to 12:44:27
2 apps.

3 Q. Where did you perform that deduction?

4 A. It's not a deduction. It's a -- it's a
5 ratio analysis. But I can -- I can show it to you. 12:44:52

6 If you go to Figure -- I'm sorry; not
7 figure -- schedule 53.

8 Q. I'm there.

9 A. Okay.

10 So if you go to Schedule 53, there's a 12:45:12
11 calculation here. I have AdMob app gross revenue
12 for -- in 2019. I have also Ad Manager app gross
13 revenue.

14 And so I'm able to -- I know, in 2019,
15 what the percentage of Ad Manager and AdMob are to 12:45:33
16 each other and what its relative percentage is,
17 what Ad Manager's relative percentage is to AdMob.

18 And so for all my calculations going
19 forward, I never allow it to vary off of that
20 ratio. I do not -- so -- so -- 12:45:59

21 Q. So --

22 A. -- other Ad Manager revenues that could
23 be actual Ad Manager revenues are not part of my
24 calculation to begin with.

25 Q. So your Ad Manager revenue numbers in 12:46:17

1 Figure 41 are, in part, deduced from the AdMob 12:46:20

2 figures that you know are app figures, since all
3 AdMob is apps?

4 A. In part. In part.

5 Q. Yeah. 12:46:34

6 A. But I also deduce it from Ad Manager's
7 app figure as well, because I -- my starting
8 point --

9 Q. Right.

10 A. -- is only with Ad Manager's app -- 12:46:41

11 Q. At that one point in time --

12 A. -- figure.

13 Q. -- in 2019?

14 A. At that point in time in 2019.

15 Q. Did you do anything to try and determine 12:46:53
16 how that ratio changed over time?

17 A. Sure. I asked for -- I actually asked
18 for information as it related to Ad Manager.

For example, the App Promo revenue

20 figures and traffic acquisition costs and AdMob 12:47:13

21 revenue figures and traffic acquisition costs were
22 provided for at least a period of the analysis.

23 But even -- even on inquiry, there were
24 no Ad Manager financials provided beyond what --
25 what I have here. So based on -- based on the be

Page 93

1 available information, I used this data point. 12:47:41

2 Q. Got it. Okay. I understand.

3 So we've been talking about Scenario 2

4 because we were talking about the assumption that

5 Google did not use SWAA-off data to serve 12:48:21
6 personalized ads.

7 Do you recall that back-and-forth?

8 A. I do recall that. My understanding is
9 that it's not an assumption. That it, in fact,
10 is -- 12:48:35

11 Q. Sure.

12 A. -- Google -- Google has -- Google has
13 informed us that that is the case.

14 Q. And I'm not disputing that that's true.
15 I just meant it's one of the assumptions of your 12:48:45
16 model. That's all.

17 A. Okay.

18 Q. With respect to Scenario 1, does that
19 assumption play any role?

20 A. No. I -- I mean, I do not have to create 12:49:03
21 a deduct for that in that case.

22 Q. Okay. And I think I understand why, but
23 we'll come back to that.

24 So now stepping back to your unjust 12:49:19
25 enrichment opinion more generally, you opine at

1 paragraph 71 -- 12:49:25

2 A. Could you hold on for one second?

3 Q. Sure.

4 A. Yes.

5 Q. -- that "the most appropriate and 12:49:39

6 reliable bases for quantifying Google's unjust

7 enrichment from the alleged wrongful conduct are"

8 essentially Google's income statements for App

9 Promo and AdMob, the financial analyses, and then

10 you say -- actually, just strike the question. 12:50:03

11 Let me instead focus your attention on

12 paragraph 73, where there are two bullet points.

13 A. Okay.

14 Q. These two bullet points correspond to

15 Scenarios 1 and 2. 12:50:33

16 A. I need a second to read it.

17 Q. Sure.

18 A. Okay. Yes, I do.

19 Q. They do correspond?

20 A. To -- yeah. One is Scenario 1, and one 12:51:05

21 is Scenario 2.

22 Q. Okay. So how did you arrive at this

23 method of calculating unjust enrichment by Google

24 from SWAA-off data as opposed to any other method?

25 A. Wait. Are you -- are you talking about 12:51:50

1 the Scenario 1 now, or Scenario 2 or... 12:51:52

2 Q. Well, both scenarios are attempting to
3 measure -- I believe they are attempting to measure
4 profits that Google earned from SWAA-off data?

5 A. From the use of SWAA-off data, yes. 12:52:09

6 Q. And I assume the -- the assumption behind
7 that is that Google, had it not been able to use
8 the SWAA-off data, would not have made these
9 profits, right?

10 A. Correct. 12:52:21

11 Q. Did you take into consideration how
12 Google's behavior would change in the but-for world
13 if it could not have used SWAA-off data in your
14 scenarios?

15 A. I -- so two answers to that. 12:53:41

16 One is, my understanding is, in
17 calculating unjust enrichment, they did not make
18 any changes in their behavior. They, in fact,
19 continued to use the SWAA-off -- the SWAA-off data.

20 To the extent that they would have been 12:54:02
21 able to make a change, I'm not aware of any change
22 that they would have been able to make that would
23 have resulted in less profits to them.

24 Q. Less profits or more profits?

25 A. Well, I'm calculating unjust enrichment. 12:54:25

1 So if they -- if they were to have made less 12:54:26
2 profits, I would have had to deduct less here.

3 Q. Okay.

4 A. Maybe we should -- maybe we should 12:54:43
5 reframe the question, because --

6 MR. LEE: Yeah.

7 THE DEPONENT: Maybe I'm -- maybe I'm
8 answering the wrong question there.

9 MR. LEE: I think you guys are talking 12:54:50
10 about two slightly different things.

11 Q. (By Mr. Santacana) So I understand that
12 your unjust enrichment opinion is effectively a
13 disgorgement of profits opinion, right?

14 A. That is correct.

15 Q. Okay. Does it take into account at all 12:54:59
16 what would have happened in the but-for world if,
17 at the start of the class period, Google had been
18 prohibited from using SWAA-off data for the
19 purposes that you find to be sources of profit?

20 A. I'm not -- so that is something I 12:55:38
21 considered. I'm not aware of anything that they
22 would have done -- that they did do or would have
23 done differently if they had been prohibited from
24 using that data.

25 So I'm not aware of any alternative, if 12:55:55

1 you will, that was available to Google. 12:55:57

2 Q. You've done consumer products damages
3 cases before?

4 A. I have done damages cases where there
5 were consumer products involved. 12:56:09

6 Q. So in, let's say -- let's just take the
7 hypothetical that you are working on an all-natural
8 juice consumer fraud case. The juice says on the
9 label it's all natural. Turns out it's not. You
10 are measuring the damages. Right? 12:56:27

11 Have you done anything like that?

12 A. No, I have not.

13 Q. Okay. So not any -- you haven't done,
14 like, consumer fraud cases?

15 A. Correct. 12:56:36

16 Q. Okay. Are you familiar with the
17 methodologies that go into account in measuring the
18 difference between what the defendant gained in
19 profit from a false representation and what it
20 would have gained in the but-for world had the
21 false representation been, instead, accurate? 12:56:47

22 A. I have a familiarity with it, but I'm
23 not -- I have not done one of those cases.

24 Q. Okay. Did you consider anywhere in your
25 opinion in this case the difference between what 12:57:09

1 Google would have gained in profit -- excuse me. 12:57:13

2 Let's start over.

3 Did you consider anywhere in your opinion
4 in this case the difference between what Google
5 earned in profit from the allegedly false 12:57:23

6 representation relating to sWAA and what it would
7 have earned in a but-for world had Google not made
8 the false representation or made the representation
9 accurate?

10 MR. LEE: Objection to form. Misstates 12:57:41
11 the claim in the case, the legal issues in the case
12 and the methodology of the report.

13 THE DEPONENT: I guess you're going to
14 have to reask that in a different way. I'm not
15 quite understanding. 12:57:54

16 Q. (By Mr. Santacana) You understand the
17 claim in the case is that the plaintiffs understand
18 one thing from the sWAA button, but, in fact, it is
19 alleged Google did another thing that deviates from
20 their understanding, right? 12:58:07

21 A. Correct.

22 Q. And you are trying to measure the damage,
23 in your unjust enrichment opinion at least, that
24 the -- you're trying to measure the profits that
25 Google gained thanks to its alleged misleading of 12:58:17

1 those plaintiffs?

12:58:21

2 MR. LEE: Objection to form.

3 Mischaracterizes the claim.

4 THE DEPONENT: I think you're

5 generally -- that's generally somewhat accurate,

12:58:30

6 yes.

7 Q. (By Mr. Santacana) And to measure that,

8 you tried to measure the profits that Google earned

9 from its use of the data it got thanks to the

10 alleged misrepresentation, right?

12:58:43

11 A. That is correct.

12 Q. And the assumption baked into that

13 opinion that you have rendered is that had Google

14 not made the alleged misrepresentation but instead

15 told the truth, then it would not have been able to

12:58:57

16 use the data in question to earn a profit, right?

17 A. Yes.

18 Q. Did you ever consider that if Google had

19 not made the alleged misrepresentation but instead

20 told truth that it still would have been able to

12:59:10

21 use the data because the user may have turned, for

22 example, WAA on?

23 MR. LEE: Same objections.

24 Mischaracterizes the claim and the methodology.

25 Q. (By Mr. Santacana) Let me ask it a

12:59:42

1 different way. I'll withdraw the question. 12:59:44

2 Why did you assume that if Google had
3 disclosed to users at the start of the class period
4 that even when they turned SWAA off, it will still
5 use SWAA-off data to serve ads and measure 01:00:08
6 conversions, that the consequence of that would be
7 that Google would simply not receive the SWAA-off
8 data?

9 The user will still see ads, right?

10 A. My understanding is that the user might 01:00:36
11 still see ads.

12 Q. The user will still buy stuff sometimes,
13 right?

14 A. That's true. But, for example, like in
15 Scenario 2, they wouldn't be seeing Google Ads 01:00:46
16 because Google wouldn't know to serve them.

17 Q. What do you mean "Google wouldn't know to
18 serve them"?

19 A. Well, there would be -- my understanding,
20 for example, in Scenario 2 is there would be no ad 01:00:59
21 requests that Google would -- would receive.

22 Now, this is -- this is tech -- this is a
23 technical area. I'm not -- I'm not 100 percent
24 sure on the exact right terminology.

25 But my understanding is that under 01:01:12

1 Scenario 2, which I think is an example that is 01:01:16
2 illustrative to what you are asking me, is Google
3 would not receive a signal to serve an ad, and so
4 they would not know to serve an ad.

5 So if an ad were to be on that page, you 01:01:34
6 said -- you said that they would just see an ad.
7 If -- if that -- that would have to come from some
8 different source.

9 Q. Couldn't Google just serve a randomly 01:01:48
10 selected ad?

11 A. No.

12 Q. Why not?

13 A. Because Google wouldn't receive a signal 01:01:56
14 to put an ad out in the first place.

15 Q. Why?

16 A. Because it wouldn't get the data.

17 Q. What data?

18 A. I -- you're asking me a technical 01:02:08
19 question now at this point, where I -- I don't know
20 technically what data that it needs to get to serve
21 an ad.

22 My understanding is that it wouldn't
23 receive that signal, so Google would not serve an
24 ad.

25 Q. I see. 01:02:19

1 A. Someone else would have to serve that ad. 01:02:20

2 Or maybe it was just an ad that's just always on
3 that page, always on that app.

4 One thing is -- for me, it's like
5 4:00 o'clock. So I don't know if we could take a 01:02:31
6 lunch -- I know we've been going about an hour.

7 MR. SANTACANA: Of course.

8 THE DEPONENT: I don't want to take a
9 super long lunch break, but --

10 MR. SANTACANA: Yeah. Can I just ask one 01:02:38
11 or two more questions? And then, yeah, we should
12 take lunch.

13 THE DEPONENT: Sure.

14 MR. SANTACANA: It should be here.

15 MR. LEE: I think it's already here. 01:02:45

16 MR. SANTACANA: Okay.

17 MR. LEE: It was up there when we got up
18 there.

19 MR. SANTACANA: Oh, good.

20 Q. (By Mr. Santacana) So I think I 01:02:50
21 understand.

22 In rendering your unjust enrichment
23 opinion, one of the assumptions that you made was
24 that, for Scenario 2 at least, I guess, it would be
25 technologically infeasible for Google to serve ads 01:03:12

1 to apps on devices where the user had swAA turned 01:03:15
2 off.

3 Is that fair to say?

4 A. That is my understanding.

5 Q. So no part of your opinion takes into 01:03:26
6 account the possibility that Google could serve ads
7 by some technological means that do not engage in
8 the alleged unlawful conduct?

9 A. That -- that's my understanding, that --
10 that under Scenario 2, under that Scenario 2, they 01:03:47
11 would not be able to.

12 Q. And Scenario 1, I think?

13 A. Well, under -- under Scenario 1, it's
14 conversion -- that Scenario 1 relates to conversion
15 tracking. So they wouldn't get the conversion 01:04:03
16 tracking data, so they wouldn't have the ability to
17 conversion track the way they do.

18 Q. Let's say that we live in that but-for
19 world, where Google cannot receive the swAA-off
20 data at issue in the case. 01:04:22

21 Couldn't Google still serve golf club
22 related ads in the PGA's mobile app without
23 receiving any swAA-off data about the user who is
24 using it?

25 A. So my understanding in Scenario -- this 01:04:50

1 relates -- what you're now talking about is 01:04:52

2 Scenario 2, because you're talking about the actual
3 serving of an ad, not the conversion tracking
4 data --

5 Q. Okay. 01:05:00

6 A. -- that is related.

7 Q. I will accept that for now.

8 A. In -- in Scenario 2, no, it would not be
9 able to serve that ad.

10 Q. Why not? 01:05:07

11 A. Because it would not be technologically
12 feasible to do that. It would not get -- you're --
13 you're asking me a technical question why it would
14 not be able to. I'm not 100 percent sure of the
15 exact technical terms. 01:05:19

16 But my understanding is that it would not
17 get the signal -- nontechnical -- to serve the ad
18 in the first place.

19 Q. I'm almost done, and we'll take lunch.

20 But I just want to make sure I understand you. 01:05:31

21 Take a look at your report -- I just need
22 a moment to find it.

23 Paragraph 41.

24 MR. LEE: Just let me get there. Hold
25 on. 01:06:18

1 THE DEPONENT: I'm at paragraph 41. 01:06:30

2 Q. (By Mr. Santacana) Okay. In paragraph
3 41, you describe the Web & App Activity, or WAA
4 setting, we've been discussing.

5 And you say that's a setting that's 01:06:44
6 "related to Google's collection and saving of a
7 user's 'activity on Google sites and apps,
8 including associated information like location, to
9 give users faster searches, better
10 recommendations,'" et cetera, et cetera. 01:06:58

11 And in paragraph 42, you describe SWAA,
12 which is similar but applies to activity on sites,
13 apps and devices that use Google services.

14 You with me so far?

15 A. I'm with you, yes. 01:07:17

16 Q. So what I'm trying to understand is, why
17 can't the PGA contract with Google to serve
18 golf-related ads in its app without Google ever
19 saving a user's activity data from apps that use
20 Google services? 01:07:38

21 Why didn't you consider that as a
22 possibility?

23 MR. LEE: I'm a little confused.

24 Are you -- are you representing that
25 that's -- or suggesting -- I don't -- I'm not 01:08:05

1 trying to pin, but I just want -- is it a 01:08:07

2 hypothetical question you're asking? Or is it --

3 are you representing that that's what Google does?

4 MR. SANTACANA: I don't even understand

5 what you're asking me, but -- 01:08:16

6 MR. LEE: Can you ask the question again,

7 then? Because I just want to make sure whether to

8 object or not.

9 Q. (By Mr. Santacana) Do you understand my

10 question? 01:08:24

11 A. Not really. I'm trying to understand --

12 I mean, I think we're talking about technical

13 issues here, and I want to make that sure I'm

14 not --

15 Q. Yeah. Let's take it piece by piece. 01:08:32

16 You told me that you believe it would be

17 technologically infeasible for Google to serve golf

18 club ads in the PGA without using SWAA-off data,

19 right?

20 A. I -- 01:08:49

21 Q. Or at least that's an assumption of your

22 unjust enrichment?

23 A. That's -- that's an assumption that --

24 and I don't know how that works --

25 Q. So I'm trying -- 01:08:57

1 A. -- from a technical perspective. 01:08:58

2 Q. I'm just trying to test that assumption a
3 little bit to see if you considered that it might
4 be more complicated than that.

5 For example, couldn't the PGA app ask 01:09:06
6 Google to serve golf club-related ads in its app
7 without ever involving a user's Web and app
8 activity sWAA-off data?

9 MR. LEE: And my question is, are you
10 suggesting that that is something that PGA does? 01:09:24

11 MR. SANTACANA: You can ask me during the
12 lunch.

13 Q. (By Mr. Santacana) Go ahead and answer
14 the question.

15 MR. LEE: Yeah, I object as improper 01:09:30
16 hypothetical. Lack of foundation.

17 THE DEPONENT: I guess -- from my
18 understanding for Scenario 2, I understand that
19 that would not be technologically feasible to do.

20 Q. (By Mr. Santacana) Let's say that the 01:09:49
21 Court rules that sWAA-off data is limited to data
22 about a user. Okay?

23 MR. LEE: Objection. Vague.

24 Q. (By Mr. Santacana) Are you with me so 01:10:06
25 far?

1 A. I'm with you. 01:10:07

2 Q. It does not include, for example, data
3 that PGA sends to Google about its own app so
4 Google can select PGA-related ads. That would be
5 outside scope. 01:10:18

6 A. Okay.

7 Q. In that scenario, would your unjust
8 enrichment Scenario 2 opinion need to be altered?

9 A. Not that I'm aware of as I sit here.

10 You're talking about a technical issue 01:10:40
11 that I'd have to -- I'd have to think about, and I
12 would also have to get technical input on. So I
13 don't know the answer to that.

14 MR. LEE: And I didn't have a chance to
15 object. Same objection. Improper hypothetical. 01:10:50

16 There's two in there.

17 Q. (By Mr. Santacana) Well, what I am
18 positing is that the Court rules that Google can
19 serve what's called contextual advertising, which
20 is ads that relate to the app in which the ad is 01:10:58
21 being served, basically, without ever using
22 sWAA-off data.

23 If you assume the Court rules that, then
24 doesn't your but-for world need to be take into
25 account that Google could have served such ads 01:11:14

1 during the class period? 01:11:16

2 A. If you're asking me to assume something
3 different than I understood, I would have to
4 analyze that. I cannot sit here and answer that as
5 I sit here. 01:11:28

6 MR. SANTACANA: Okay. We can take lunch.

7 THE VIDEOGRAPHER: This marks the end of
8 Media No. 2. Off the record. The time is 1:11.

9 (Recess taken.)

10 THE VIDEOGRAPHER: This marks the 01:11:44
11 beginning of Media No. 3 in the deposition of
12 Michael Lasinski. We are back on the record. The
13 time is 2:06.

14 Q. (By Mr. Santacana) Sir, when we left
15 off, we were talking about your unjust enrichment 02:06:57
16 opinion and the but-for world in which Google was
17 prohibited from using sWAA-off data to serve ads.

18 Do you recall that?

19 A. Yes.

20 Q. I want to just understand a little more 02:07:16
21 of that but-for scenario for a moment.

22 So as I understand what you're saying, in
23 that but-for world, the users who have sWAA off
24 would not be served any ads by Google in -- via
25 AdMob or Ad Manager, right? 02:07:35

1 A. That is my understanding, yes. 02:07:38

2 Q. And I guess what I'm curious about is
3 what would happen, if that were the case, to the
4 money that advertisers were devoting to placing ads
5 on Google's Display Network if, as you say, Google 02:08:00
6 could not serve any ads to sWAA-off users.

7 MR. LEE: Calls for speculation. Lack of
8 foundation.

9 THE DEPONENT: I guess I'm not
10 understanding what you're -- what you're trying to 02:08:22
11 ask there.

12 Q. (By Mr. Santacana) I'll break it down.

13 So Google makes money from placing ads,
14 right?

15 A. In part, yes. 02:08:29

16 Q. That's what we talked about earlier.

17 So an advertiser pays Google and expects
18 that Google show ads to people in return, right?

19 A. That is their business model.

20 Q. So all of sudden now, Google says, "Sure 02:08:45
21 we'll show ads to people, but we won't show any to
22 sWAA-off users."

23 Right? Under your unjust enrichment
24 theory.

25 A. Well, my -- my understanding is that you 02:08:58

1 couldn't -- they would not be able to serve ads on 02:09:01
2 third-party app sites to sWAA-off users.

3 Q. Right.

4 So there's apps that have AdMob in them, 02:09:19
5 right?

6 A. That is my understanding, yes.

7 Q. AdMob shows ads that Google serves, 02:09:25
8 right?

9 A. That is my understanding.

10 Q. And then those ads were bought by some 02:09:25
11 other advertiser who said, "Can you please place
12 these ads on your Display Network?"

13 Right?

14 A. That is my understanding.

15 Q. So Google says, all of a sudden, "We'll 02:09:37
16 still place your ads, but we can't place them in --
17 for any sWAA-off users. If the user is sWAA-off,
18 we can't show your ad to them."

19 Are you with me?

20 A. I understand what you're saying, yes. 02:09:55

21 Q. I think your opinion posits that the
22 advertiser would pay less than in a world where
23 they thought the sWAA-off user was going to receive
24 ads; is that fair to say?

25 A. The advertiser would pay less because 02:10:14

1 they did not -- to Google. The advertiser would 02:10:16
2 pay less to Google because Google did not -- would
3 not serve an ad in those cases.

4 Q. But only to sWAA-off users. It would 02:10:27
5 still serve ads to sWAA-on users and signed-out
6 users, right?

7 A. That is -- whether -- whether or not it
8 did or it did not doesn't concern me, because I'm
9 only concerned with sWAA-off users. So what it
10 does outside of that -- 02:10:40

11 Q. Right.

12 A. -- that's its business.

13 Q. So why would the advertiser pay Google
14 less? Why wouldn't it pay Google the same amount
15 to place ads, and the ads would just be shown to a 02:10:51
16 different mix of people, namely, people who don't
17 have sWAA turned off?

18 MR. LEE: Calls for speculation. Lack of
19 foundation.

20 THE DEPONENT: They would -- they would 02:11:08
21 pay them less because those ads that are currently
22 being shown to sWAA-off users would not be shown to
23 sWAA-off users. They may go to a different
24 advertising firm or a different -- different
25 company that could serve those ads, but they 02:11:25

1 wouldn't go to Google. Google would not be able to 02:11:28
2 serve those ads.

3 Q. (By Mr. Santacana) So remember when we
4 were talking about the automated bid process?

5 A. I do. 02:11:40

6 Q. And you said the advertiser sets a bid.

7 Then there's a competition for whose ad gets shown
8 to people. You're not an expert in that, but
9 somehow that bid gets translated into the delivery
10 of advertising, right? 02:11:53

11 A. That is my understanding.

12 Q. So if the advertiser is engaging in the
13 automated bidding process on Google's website,
14 right, they have gone into the portal to do that,
15 and there's a message there that says, "Hey,
16 Advertiser, just take into account when you make
17 your bid, your ads will only be shown to SWAA-on
18 and signed-out users. If the user is SWAA-off, I
19 will not show them your ad." 02:12:09

20 Okay? 02:12:25

21 A. Yes.

22 Q. That -- that would -- because that would
23 be addressing -- that is your unjust enrichment
24 but-for world, right?

25 A. It -- 02:12:33

1 MR. LEE: Hold on. 02:12:34

2 Objection. Improper hypothetical. Calls
3 for speculation. Lack of foundation.

4 Go ahead.

5 THE DEPONENT: If -- if you are asking if 02:12:43
6 my but-for world in the case of the Scenario 2 is
7 that Google would not serve ads to SWAA-off users
8 as it relates to AdMob and Ad Manager, that portion
9 is accurate.

10 Q. (By Mr. Santacana) Okay. 02:13:01

11 So Google tells the advertiser that. Is
12 it your opinion that the advertiser's response is
13 to lower their bid amount rather than to simply
14 accept that their ads won't be shown to SWAA-off
15 users but can still be shown to other users? 02:13:18

16 MR. LEE: Same objections.

17 THE DEPONENT: My -- my assumption is not
18 that it would necessarily lower its bids in other
19 situations. But in a situation where there's a
20 SWAA-off user, then they don't get a signal that 02:13:38
21 they would certainly serve less ads.

22 Q. (By Mr. Santacana) So are you positing
23 that advertisers are bidding per ad? They are
24 saying, "To this user, show this ad; to that user,
25 show that ad"? 02:14:11

1 A. No. 02:14:12

2 Q. Okay. So you understand that the
3 advertiser's saying to Google, "Here's a bucket of
4 money; here's what I want to do with it." Right?

5 A. I do understand that. 02:14:19

6 Q. And there's lots of different ways they
7 can prioritize. They can say, "I want to
8 prioritize cost per click; I want you to prioritize
9 cost per impression; I want you to prioritize
10 conversions." Right? 02:14:27

11 A. Yes. That's -- I mean, but that's my
12 understanding is they have the options available to
13 them.

14 Q. Okay. So Nike is on Google's website.
15 They're going to place some ads in apps. They want 02:14:38
16 ads to go across Google's Display Network. And
17 they say, "My budget is \$5,000 for this ad
18 campaign, and I want to prioritize impressions."

19 Okay. With me?

20 A. I'm with you. 02:14:56

21 Q. Google says, "That sounds good. I'm
22 going to place the ads for you. Just so you know,
23 when I place them, no SWAA-off users will see this
24 ad campaign."

25 Okay? 02:15:09

1 A. I understand what you're saying. 02:15:09

2 Q. Is it your opinion that Nike would reduce
3 the \$5,000 budget at that point?

4 MR. LEE: Same objections.

5 Go ahead. 02:15:22

6 THE DEPONENT: I would not -- I don't
7 know that it would be a one by each advertiser. I
8 didn't look at it by -- on advertiser by
9 advertiser.

10 But certainly, if Nike had the ability to 02:15:32

11 place less ads, and Nike had -- I'm sorry; Nike --

12 Google had the ability to place less ads and were

13 to go to its advertisers and tell them you

14 cannot -- I can't serve ads to SWAA-off users, and

15 its -- it's a significant percentage of the number 02:15:54

16 of people that one would try to go to, yes, I do

17 think that there would be a lowering of the value

18 that Google receives.

19 Q. (By Mr. Santacana) Under your opinion,

20 there would have to be, right? Otherwise Google 02:16:18

21 would still make the same amount of revenue in that

22 scenario?

23 A. Under -- under my opinion, yes, they

24 do -- they do receive less revenue and -- and,

25 ultimately, less profits. 02:16:31

1 Q. And the mechanism by which they receive 02:16:33

2 less revenue necessarily is that advertisers decide
3 to spend less money?

4 A. They do decide -- they do spend less
5 money, yes. 02:16:43

6 Q. Do you, in your report, analyze the
7 factors that those advertisers take into account in
8 the but-for world where they are deciding to spend
9 less money thanks to the SWAA-off data prohibition?

10 A. I do not do advertiser-by-advertiser 02:17:18
11 analysis in my report. I think it's -- I think,
12 based on the information available to me, my report
13 was -- is appropriate given the Scenario 2
14 assumptions that there would be less ads that would
15 be able to be served. 02:17:41

16 Q. Just so I'm clear, in Scenario 1, are you
17 saying the ads can still be served, but the
18 conversions cannot be measured; whereas Scenario 2,
19 you're saying the ads can't be served at all?

20 A. Yes. In Scenario 1, the ads -- the ads 02:18:10
21 can be -- the ads can be served.

22 Q. And so there, the source of profit that
23 you're disgorging is the successful measurement of
24 a conversion?

25 A. The -- what I'm actually -- the source of 02:18:31

1 value in that is actually Google's use of that 02:18:37
2 information, Google's use of conversion tracking
3 information, in its -- in its algorithms,
4 machine-learning algorithms.

5 Q. Sorry. What do you mean by that? 02:18:57

6 A. So my understanding is that when Google
7 tracks conversions, that -- that data goes into
8 their -- goes into their algorithms that they use
9 for, for example, autobidding. And then that data
10 is important for them to be able to make those 02:19:24
11 algorithms work.

12 And therefore -- and therefore, the --
13 therefore, Google attributes revenue to its
14 conversion tracking, its ability to conversion
15 track and then provide that -- use that information 02:19:54
16 in its own algorithms and bidding processes.

17 Q. Okay. We'll come back to that.

18 But just sticking with what we were just
19 discussing, you assume, necessarily, that
20 advertisers would lower the amount of money that 02:20:13
21 they spend with Google in response to a prohibition
22 on the use of SWAA-off data, right?

23 A. I believe that that's accurate, yes.

24 Q. And the amount of money by which those
25 advertisers -- that's not a sentence. Let's try 02:20:35

1 that again. 02:20:40

2 The difference that those advertisers
3 spend with Google, that drop in the amount of money
4 they're willing to spend, corresponds one-to-one
5 with the amount of revenue Google makes for the 02:20:55
6 service of sWAA-off user advertising, right?

7 A. For AdMob and for Ad Manager, that is
8 correct.

9 Q. All things being equal, your assumption
10 in your unjust enrichment Scenario 2 model is that, 02:21:21
11 in all, Google's revenue will drop by the amount
12 that it earns for serving ads to sWAA-off users
13 because advertisers will choose to spend in total
14 what they used to spend minus that amount?

15 A. Well, I mean, to be clear, that -- that 02:22:02
16 is accurate, but then also Google would save
17 traffic acquisition costs as well. So the
18 profits -- the profits are not equal to the
19 revenues in this case.

20 Q. Understood. Let's -- that's a very good 02:22:17
21 point, and we'll come back to costs later. So I'll
22 try and remember to stick to revenue for now --

23 A. Okay.

24 Q. -- in my questions.

25 So here's what I don't understand, then, 02:22:32

1 about your assumptions behind Scenario 2. 02:22:34

2 If an advertiser wants to reach a certain
3 number of people or achieve a certain number of
4 conversions, why would they care whether Google
5 will show their ad to all users or all users except 02:22:49
6 sWAA-off users?

7 What difference does it make to the
8 advertiser such that they will lower their budget
9 by a corresponding amount?

10 A. Well, I mean, here's an example: If -- 02:23:13
11 if an advertiser knows that it's not going to -- to
12 reach a significant amount of people through
13 Google's ad network -- you know, we know in -- in
14 the most recent periods, it's 13 percent. It's
15 like a 13 percent sWAA-off -- 13, 14, 15, percent 02:23:32
16 sWAA-off percentage. That was earlier.

17 If one went to -- went to that advertiser
18 and said, "We're not going to reach those people,"
19 it is very likely that they would reduce -- reduce
20 their spending and go to someone that could reach. 02:23:53
21 That's -- that could reach those people.

22 Q. Why?

23 A. Because they know. Because Google is now
24 telling them that our universe is incomplete.
25 Google is now telling them that we don't have 02:24:11

1 complete data; we don't have -- we don't have 02:24:14
2 information on a significant portion of the -- of
3 the people that could be purchasers. We can't get
4 that information.

5 And so, therefore, you know, our model -- 02:24:25
6 ultimately, our models are not as robust and they
7 once were. Our reach is not as high as we have
8 explained it to be.

9 I think that those would have both 02:24:47
10 first-order -- I think the documents show that
11 those would have both first-order impacts and
12 second-order impacts. And first order relates to
13 advertising revenue, and second order relates to
14 their overall model being less efficient.

15 Q. The documents you are referring to are 02:25:07
16 about SWAA or about GAP?

17 A. The document that I'm referring to in 02:25:30
18 that particular case is there are emails about
19 SWAA, there are emails about SWAA as it relates to
20 the GAP analyses, and there are hypotheses in those
21 emails that say we think that there would be both
22 first-order impacts as well as second-order
23 impacts.

24 Q. Hypotheses that were never studied, 02:25:52
25 right?

1 A. I do not have access to actual studies 02:25:52
2 that were done for sWAA. I don't know the answer
3 to that, whether or not it was studied or not
4 studied. It may have been studied but not produced
5 in this case. 02:26:02

6 Q. Fair enough.

7 A. But I don't have a SWAA study, if that's
8 what you're asking, by Google.

9 Q. You do not know if those hypotheses were
10 correct or not? 02:26:13

11 A. I don't -- I don't know for sure if they
12 were correct or not. They seem like they would be
13 correct, but I don't know for sure.

14 Q. And just to be clear, those were
15 hypotheses about what would happen if more users 02:26:39
16 turned SWAA off?

17 A. I -- I mean, I'd have to look at the
18 document. I think that there was an estimate of --
19 no, I don't think it was necessarily more users.

20 I think there was a hypotheses, if I'm 02:26:50
21 remembering correctly, like a mid 20 percent SWAA
22 off, like a 25 percent SWAA off, is what -- is what
23 they were asking about, what they were talking
24 about in their discussions.

25 Q. Okay. We'll try and find the document. 02:27:15

1 Unless you happen to know which one it is. 02:27:21

2 A. I don't. I mean, that's just one
3 document I can think of as I'm sitting here. There
4 may be others.

5 THE DEPONENT: One thing I'm just going 02:27:29
6 to mention before we -- it is getting --

7 MR. LEE: A little hot in here?

8 THE DEPONENT: It is going to get hot in
9 here if they turned up the heat too much. I'm the
10 one sitting in -- here in a tie, so... 02:27:38

11 (Discussion off the stenographic record.)

12 Q. (By Mr. Santacana) Okay. So back to the
13 advertiser in the but-for world who is being told
14 that some percentage of the audience will not be
15 reached by the ad campaign. 02:28:16

16 And you say the natural response, then,
17 is to lower the amount of money they are willing to
18 spend with Google and perhaps reallocate some money
19 to other advertising networks?

20 A. That -- that is one way of looking at it, 02:28:30
21 yes.

22 Q. Did you measure the amount of impact that
23 that disclosure would have on advertisers'
24 decisions on where to allocate their advertising
25 budgets? 02:28:50

1 MR. LEE: What disclosure? 02:28:52

2 MR. SANTACANA: The disclosure by Google
3 to the advertiser that their ads will not reach
4 SWAA-off users.

5 MR. LEE: Okay. 02:29:01

6 Objection. Improper hypothetical. Calls
7 for speculation. Lack of foundation.

8 THE DEPONENT: I mean, I'm not aware of
9 any disclosure like that. I think -- I don't -- I
10 don't know that any disclosure like that was made. 02:29:16
11 So I'm -- I did not measure that.

12 Q. (By Mr. Santacana) So -- right.

13 What we're talking about is your but-for
14 world where Google is prohibited from serving ads
15 to SWAA-off users, right? 02:29:30

16 A. Well, that is -- that is the but-for
17 world for Scenario 2.

18 Q. And in that world --

19 A. And let's just be clear: SWAA-off users
20 on third-party apps. 02:29:41

21 Q. Yes.

22 And in that world, you posit that
23 advertisers' response to that prohibition will be
24 to lower their ad budget with Google because they
25 will understand that their ads will not reach the 02:29:56

1 entire potential audience. SWAA-off users can't be 02:29:59
2 reached anymore, right?

3 A. That is right.

4 Q. Did you attempt to measure how much lower 02:30:10
5 the ad budgets would be in response to those
6 advertisers learning that they would not reach
7 SWAA-off users?

8 MR. LEE: Same objections. Improper 02:30:24
9 hypothetical. Calls for speculation. Lack of
10 foundation.

11 THE DEPONENT: Again, I'm not aware of 02:30:35
12 any -- you're -- you're asking me about a world in
13 which that could have happened. I gave you an
14 example. There may be others -- other examples in
15 which advertisers would have -- would have spent
16 less. That's just one example.

17 And so no, I did not attempt to -- to
18 measure that. I don't think I needed to, because I
19 think it's pretty clear that there would have been
20 less spending, and I quantified that as such. 02:30:52

21 Q. (By Mr. Santacana) Well, that's my
22 question.

23 You quantified it as such. How?

24 A. I -- exactly as I explained in my report.
25 There's going to be less ad requests, so then less 02:31:08

1 of an ability to serve those ads, and, therefore, 02:31:11
2 advertisers would spend less.

3 Q. But the amount that you quantified it as
4 is the exact amount that Google has earned from
5 SWAA-off users. It assumes a one-for-one drop in 02:31:25
6 budget, right?

7 A. For -- for Scenario 2, yes.

8 Q. So in Scenario 2, an advertiser that
9 would have spent \$100 to reach the entire audience,
10 if they are told that 10 percent of the audience 02:31:45
11 won't be reached because they are SWAA-off, that
12 advertiser chooses to spend \$90 instead.

13 Is that a fair characterization?

14 A. I think that that is -- yeah, I think
15 that that's how the mechanics of it how would work. 02:32:04

16 Well, not -- not quite. Not quite.
17 Because that -- that only relates to the ad --
18 advertising percentage of it. They still would
19 get -- Google is still earning money on the
20 conversion element of it. 02:32:18

21 So I have to take it into consideration,
22 it's -- the conversion information. But for
23 Scenario 2, that is correct. That is accurate.

24 Q. So keeping just Scenario 2 in mind --

25 A. Correct. 02:32:32

1 Q. -- that's the scenario where Google can't 02:32:33
2 serve ads. They can still serve ads in Scenario 1?
3 A. That is my understanding, yes.
4 Q. Okay. So keeping Scenario 2 in mind,
5 Google can't serve ads, advertiser understands that 02:32:43
6 10 percent of their audience has been excluded from
7 the pool --
8 A. More than that.
9 Q. I'm just saying it's 10 -- let's say it's
10 10 percent for a round number. 02:32:53
11 A. Okay.
12 Q. The SWAA-off people are excluded from the
13 pool?
14 A. Yes.
15 Q. They lower their ad budget one for one by 02:32:58
16 the percentage of people who are excluded from the
17 pool? That's your opinion?
18 A. No, not one for one by the percentage
19 of -- not one for one by the people that were
20 excluded from the pool. That's not right. 02:33:12
21 Q. Okay. Why not?
22 A. Because what -- what it is, actually, is
23 it's those ads that were actually served to those
24 people -- those ads that were actually served to
25 those people, I'm actually lowering -- I'm actually 02:33:27

1 looking at the actual unjust enrichment in that -- 02:33:32
2 in that case.

3 I'm actually looking at what they
4 actually earned, what was actually paid to them in
5 that case. 02:33:43

6 Q. Right.

7 A. And they -- in the but-for world, they
8 would not have been able to serve those ads.

9 They did serve those ads, so that's what
10 they actually earned. That's my -- that's the 02:33:56
11 calculation that I'm making.

12 Q. So, then, is it fair to say that you are
13 not trying to hypothesize how consumer and
14 advertiser and Google behavior would have changed
15 in the but-for world? Your task really was to 02:34:13
16 measure the exact amount of profits Google did make
17 from SWAA-off advertising?

18 A. Yes. So in the but-for world, Google
19 actually served those ads and actually profited
20 from the information that it collected. And 02:34:35
21 that's --

22 Q. In the real world?

23 A. In the real world, they did.

24 In the but-for world, they should have
25 not been able to. 02:34:43

1 And so in that world, they actually 02:34:44
2 earned that money, and I am calculating the amount
3 of profits that should have been disgorged.

4 That's the calculation. And maybe we 02:34:54
5 were talking past each other earlier, because
6 that's what I was telling you is what had happened.

7 Q. I think we were. So here's where I get
8 confused.

9 You've done IP cases, lots of them, 02:35:06
10 right?

11 A. Yes.

12 Q. And in those cases, sometimes you
13 calculate a reasonable royalty, right?

14 A. Correct.

15 Q. And you calculate disgorgement of 02:35:17
16 profits, right?

17 A. Correct.

18 Q. For example, in a patent case, where
19 infringement is found on a component of a laptop,
20 let's say the RAM chip, one calculation you might 02:35:28
21 do is how much profit would the laptop seller have
22 made if they could not have used that RAM chip as
23 designed?

24 A. Okay.

25 Q. Right? 02:35:44

1 A. Okay. I'm following your hypothetical. 02:35:44

2 Q. Have you done that kind of an analysis

3 before?

4 A. Yes.

5 Q. When you do that analysis, you start with 02:35:52

6 how much revenue the laptop seller made, right?

7 A. Correct.

8 Q. You deduct costs?

9 A. Correct.

10 Q. And you take into account how consumer 02:36:10

11 behavior would have changed in the but-for world

12 where the laptop seller could not use that RAM

13 chip, right?

14 A. Correct.

15 Q. And you take into account what the laptop 02:36:24

16 seller could have done to design around the claims

17 of the patent that were found to be infringed,

18 right?

19 MR. LEE: Objection. Lack of foundation.

20 THE DEPONENT: I understand. I'm 02:36:37

21 following your hypothetical.

22 Q. (By Mr. Santacana) Have you done that?

23 A. In cases?

24 MR. LEE: Objection.

25 Q. (By Mr. Santacana) Have you done an 02:36:42

1 analysis like that before? 02:36:43

2 A. I mean, I'm -- I think I'm following it,
3 but I think -- I think what you're talking about is
4 the next-best alternative. But I'm not quite sure.

5 Q. In part, I am. Yes. 02:36:54

6 A. Okay.

7 Q. Did you take into account a next-best
8 alternative here, in this case?

9 A. Well, my understanding in this case is
10 that liability is based on what actually happened 02:37:05
11 in the real world versus what should have happened
12 in the but-for world.

13 And what actually happened in this world
14 was Google actually used the -- collected and used
15 the data. And in the but-for world, they should 02:37:22
16 not have done that.

17 Q. Just like an infringer actually sold
18 infringing products, and in the but-for world, they
19 should not have done that?

20 A. I don't know if I can make that analogy, 02:37:34
21 because I'm not a lawyer, and if it's just like the
22 same thing.

23 That's -- that's a different standard.

24 Q. I'm asking --

25 A. There's a different legal -- 02:37:43

1 Q. -- perspective. 02:37:44

2 A. -- different legal cases.

3 Q. I'm asking from your perspective as a

4 damages expert who's done that countless times,

5 right, you've considered what happens when a 02:37:50

6 component of a product is infringing, right?

7 A. I have, yes.

8 Q. And when you do that analysis, you don't

9 only take into account the profits made on the

10 product that was sold and the costs involved in 02:38:06

11 making the infringing component. You also take

12 into account the possibility that the infringer

13 could have used a different component, right?

14 A. That's one mechanism. That's one way to

15 look at it, correct. 02:38:20

16 Q. So, for example, in the case, if Nike has

17 a \$100 budget, and Google says you are not going to

18 reach swaa-off users through apps, Nike could

19 reallocate the budget to other Google advertising

20 properties, right? 02:38:31

21 MR. LEE: Calls for speculation.

22 THE DEPONENT: I think you're just --

23 MR. LEE: Hold on. Calls for

24 speculation. Lack of foundation. Improper

25 hypothetical. 02:38:40

1 Go ahead. 02:38:40

2 THE DEPONENT: I mean, I think you're
3 asking me to just speculate on what they would do.

4 And I'm -- I didn't do that in my report. I'm not
5 here to do that. 02:38:47

6 Q. (By Mr. Santacana) Okay.

7 A. What I'm doing is calculating what the
8 actual but-for world would have been.

9 Q. Well, I don't -- but you're not, right?
10 Because you're not trying to -- to hypothesize how 02:38:57
11 the parties in the transaction would react to the
12 constraint that you're placing on the market, which
13 is Google cannot use SWAA-off data to serve ads.

14 You did not attempt to hypothesize, model
15 or otherwise study how the parties in the 02:39:14
16 transaction would react to that constraint, right?

17 A. My understanding -- my understanding is
18 the but-for world is actually -- Google actually
19 made a promise -- layman's terms -- made a promise,
20 did not live up to promise, and then actually used 02:39:34
21 the information and actually profited from that
22 information -- from that data.

23 And I calculated the profits that they
24 made from that data, you know, because I have
25 assumed that liability -- assumed that there's 02:39:46

1 liability. 02:39:50

2 Q. You've assumed there's a liability, and
3 you've assumed that the parties to the advertising
4 transaction would not have changed their behavior
5 in response to the prohibition on the use of 02:40:03
6 sWAA-off data for advertising?

7 A. I mean, no. My understanding of the
8 but-for world is that they did profit from this
9 information.

10 And my job is calculate how they profited 02:40:19
11 from the information that they took in an
12 ill-gotten way, not to speculate on what they could
13 have done differently. And I'm not aware of
14 anything that they could have done differently.

15 Q. With respect to Scenario 2? 02:40:40

16 A. Correct. I mean, I think that that's
17 what we're talking about is Scenario 2.

18 Q. Yeah.

19 In effect, as I understand it, among
20 other things, you assume that the sWAA button was 02:41:00
21 meant to function as an ad blocker on Google's
22 AdMob and Ad Manager SDKs; is that fair to say?

23 A. No, I -- I have not assumed that.

24 Q. Well, you're saying that -- that you
25 assume that it's impossible for Google to serve ads 02:41:26

1 through AdMob and Ad Manager when the user has sWAA 02:41:28
2 off, right?
3 A. For Scenario 2.
4 Q. Right?
5 A. Correct. 02:41:36
6 Q. So in effect, what you're saying is that
7 when the user turns sWAA off, it functions in part
8 like an ad blocker. If they use an app that uses
9 AdMob, where there might have been ad, now there's
10 none? 02:41:50
11 MR. LEE: Objection to form.
12 THE DEPONENT: No, I -- I don't agree
13 with that.
14 Q. (By Mr. Santacana) Why not?
15 A. Because I understand that Google would 02:42:04
16 not be able to serve an ad, but I'm not aware that
17 there wouldn't be some other way to -- to have an
18 ad served to them.
19 Q. I see. So the app developer could
20 integrate a different advertising platform and so 02:42:18
21 that for sWAA-off users, instead of showing a
22 Google ad, they show a Facebook ad?
23 A. I -- I'm not sure the mechanism for which
24 it would happen, but I have not assumed that they
25 would -- I have not assumed that they would -- that 02:42:32

1 they've switched an ad blocker on. 02:42:37

I've assumed -- I've assumed that their
data is not available for Google to serve an ad in
Scenario 2.

5 Q. So it's not an ad blocker; it's a Google 02:42:49
6 ad blocker?

7 MR. LEE: Objection to form.

8 THE DEPONENT: My understanding is, based
9 on input given to me, is that Google would not be
10 able to serve an ad in those situations. 02:43:06

11 Whether or not you want to call it an ad
12 blocker, I've never called it that, but Google
13 would not be able to serve an ad in those
14 situations.

15 Q. (By Mr. Santacana) Okay. 02:43:19

16 Take a look at paragraph 87 of your
17 report.

18 A. Okay.

Q. And then 88, please.

20 A. Okay.

21 Q. In 87 and 88, you identify a figure,
22 82.2 percent, as equivalent to Google's
23 determination of the proportion of App Display
24 revenue from signed-in users as represented in the

25 | 02 : 45 : 37

1 Do you see what I'm talking about? 02:45:39

2 A. Yes, I do.

3 Q. What does it mean that 82.2 percent is
4 the proportion of App Display revenue from
5 signed-in, as that is used in the [REDACTED] [REDACTED]

6 [REDACTED]
7 MR. LEE: Objection.

8 I don't understand the question.

9 Answer if you know.

10 THE DEPONENT: Well, I don't -- I 02:46:10
11 don't -- I, in fact, don't understand what you're
12 trying to ask me, because I think it's...

13 Q. (By Mr. Santacana) I just don't
14 understand the phrase. What does it mean?

15 A. Could you -- could you reask the 02:46:18
16 question, then?

17 Q. Yes. Let me see if I can find -- take a
18 look at paragraph 63.

19 A. Okay.

20 Q. So paragraph 63 is referring to Figure 02:46:59
21 15, right?

22 A. Paragraph -- no. Paragraph 63 is
23 referring to Schedule 15.1.

24 MR. LEE: I think he's referring to the
25 first phrase in the 63. You're right, but... 02:47:24

1 Q. (By Mr. Santacana) It says -- 02:47:27

2 MR. LEE: You're focusing -- you're both
3 right.

4 Q. (By Mr. Santacana) Yeah. Not the
5 footnote. I'm just saying it starts "as indicated 02:47:30
6 in figure above," which I think means Figure 15?

7 A. I see. Yes. That is correct.

8 Q. Okay. And Figure 15, which you've titled
9 "YouTube: GAP Consent Impact Summary," that's from
10 the [REDACTED] 02:47:45

11 A. Yes, it is.

12 Q. And as you understand it, that was a
13 model created by Google and intended to measure the
14 impact on Google's revenues from changes in the
15 rate of consent for GAP? 02:48:01

16 A. That is correct. And in this figure, it
17 relates to YouTube.

18 Q. In this figure, it relates to YouTube.
19 And the 82.2 percent comes from where?

20 A. So underlying this presentation, there's 02:48:48
21 a model, an Excel model.

22 Inside that Excel model, there are a
23 number of cells that calculate signed-in and
24 signed-out revenues for a variety of different
25 Google products, if you will. 02:49:21

1 And that Excel model that underlies this 02:49:26
2 presentation, that Excel model calculates signed-in
3 and signed-out revenue for App Display. And I use
4 the information that's available for App Display.

5 So it's not -- it's not in Figure 15. 02:49:47
6 It's actually in the model that underlies
7 Figure 15, the Excel model.

8 Q. Okay. So in a moment, it should be
9 available to you on that device as Exhibit 2.

10 (Exhibit 2 was marked for identification 02:50:04
11 by the Court Reporter and is attached hereto.)

12 MR. SANTACANA: While we wait for it, I
13 want to clarify something else about that
14 paragraph 63.

15 Q. (By Mr. Santacana) Your goal in 02:50:18
16 identifying this 82.2 percent figure was to
17 determine the proportion of users who engage with
18 AdMob and Ad Manager ads who are signed in.

19 Did I get that right?

20 A. Well, not -- no. 02:50:56

21 Q. No. Okay. Help me out.

22 A. So my goal is, since I'm doing a
23 revenue-based analysis, is to identify the amount
24 of signed-in and signed-out users' revenue.

25 Q. Period. 02:51:13

1 A. I -- I need a revenue -- for my 02:51:14
2 calculation, I want a revenue apportionment, not a
3 user apportionment.

4 Q. I see what you're saying. I see what 02:51:28
5 you're saying. Right.

6 So you're trying to determine what
7 percentage of Google's -- well, in paragraph 88,
8 you're trying to determine what percentage of
9 Google's App Promo revenue comes from signed-in
10 users, which you conclude to be 82.2 percent? 02:51:44

11 A. Just -- just to be clear, yes, but it
12 actually is App Promo revenue net of traffic
13 acquisition costs, because that's what I'm doing my
14 analysis on.

15 Q. Fair enough. 02:52:23

16 THE DEPONENT: Nothing has popped up
17 here, by the way.

18 MR. LEE: Oh, you've got to hit the
19 "refresh" button. See that one right there? You
20 should get something. 02:52:33

21 THE DEPONENT: Okay.

22 MR. LEE: There's two things that popped
23 up, and one doesn't have an exhibit number. I
24 don't know if it's the same document or not.

25 (Discussion off the stenographic record.) 02:52:43

1 MR. LEE: That was very hard to deal with 02:52:54
2 on the browser. So just take your time and make
3 sure you scroll all the way through. Sometimes
4 it's not always there.

5 THE DEPONENT: Okay. Okay. I've got it 02:53:30
6 open.

7 Q. (By Mr. Santacana) Great. Okay.

8 If you wouldn't mind just identifying for
9 me the cell with the 82.2 percent just so we have
10 on the record which one we are talking about. 02:53:45

11 A. I think I have to point us to three.

12 Q. Sure.

13 A. So if you go the "Summary" tab.

14 Q. I'm there.

15 A. If you go the "Summary" tab, you see it 02:54:28
16 lists "Product."

17 Q. Yes.

18 A. And it lists "App Display."

19 Q. Yes.

20 A. And then if you see, it says 82 percent 02:54:34
21 signed in, 18 percent signed out.

22 Q. Yes.

23 A. I can't do this on this machine, I don't
24 think. But I'm pretty sure...

25 (Discussion off the stenographic record.) 02:54:52

1 THE DEPONENT: As I'm clicking on these 02:54:54
2 cells, I'm not seeing what I normally see with my
3 Excel.

4 MR. LEE: Yeah. I think that's because
5 it's in browser instead of the file. 02:54:59

6 THE DEPONENT: But if you go to the
7 "Matrix" tab --

8 (Discussion off the stenographic record.)

9 MR. SANTACANA: I'm there.

10 A. Okay. So if you go to the -- the 02:55:25
11 "Matrix" tab, the first number that I'll point you
12 to is B4 -- B43.

13 Q. (By Mr. Santacana) Okay.

A. You see it says "App Display" there?

16 A. That is signed out.

17 Q. Yup.

18 A. Net, signed-out net.

19 And then if you go to --

20 Q. B25? 02:56:12

A. -- B25. It's App Display, signed-in net.

22 And then if you make that -- if you

23 actually make that calculation, it -- it's
24 82-point -- I think it turns out to be
25 82.18 percent.

1 MR. SANTACANA: Can we go off for a 02:56:36
2 second?

3 MR. LEE: Yeah.

4 THE VIDEOGRAPHER: This marks the end of
5 Media No. 3. Off the record. The time is 2:56. 02:56:39

6 (Recess taken.)

7 THE VIDEOGRAPHER: This marks the
8 beginning of Media No. 4 in the deposition of
9 Michael Lasinski. We're back on the record. The
10 time is 3:05. 03:06:11

11 Q. (By Mr. Santacana) We were talking about
12 that 82.2 percent figure. I think for now you can
13 look back at your report to paragraph 88. I just
14 want to make sure I understand the figure.

15 You got it? 03:06:39

16 A. Yes.

17 Q. The 82.2 percent reflects the percentage
18 of revenue on App Display at the point in time
19 where that model was done that was signed-in
20 revenue, right? 03:07:00

21 A. Signed in versus signed out versus total.
22 Yes, it does -- it does represent that at -- at the
23 time that it was completed, the model was
24 completed.

25 But for completeness, however, the model 03:07:17

1 actually ends up using that data point in each of 03:07:21
2 the years that it projects forward to. So it
3 doesn't just -- it doesn't change 82.2 percent for
4 App Display in each of the following years that it
5 models after that. It's a constant. 03:07:39

6 Q. Okay. I got it. All right.

7 So you read Knittel's report?

8 MR. LEE: Asked and answered.

9 MR. SANTACANA: It's a segue.

10 THE DEPONENT: I did. I did. I did. 03:08:06

11 MR. LEE: I couldn't even keep a straight
12 face.

13 Go ahead.

14 THE DEPONENT: I did read Knittel's
15 report, yes. 03:08:12

16 Q. (By Mr. Santacana) You saw that one of
17 his criticisms of your analysis is that it did not
18 take into account the impact of iOS 14 and its
19 release in September of 2020.

20 Do you recall reading about that? 03:08:25

21 A. Yes, I do recall reading that about.

22 I don't agree with his conclusions, but I
23 do recall reading about that.

24 Q. Tell me why.

25 A. So, first of all, just from a very 03:08:47

1 technical standpoint, I don't -- I understand that 03:08:50
2 iOS 14 actually was not where there was any sort
3 of -- this is a layperson's version of -- of the
4 technical discussion.

5 iOS 14 is not where there was an actual 03:09:10
6 change. I understand there was iOS14.5. So it --
7 so the -- the date that he -- he says things should
8 have changed, my understanding is it's actually
9 later than that date.

10 Q. Okay. 03:09:29

11 A. Then, secondly, I understand that Google
12 could have known what iOS 14.5 and beyond users
13 SWAA status was. There's technically a way that
14 they could have known that, technically a way that
15 Google could have known that. 03:09:59

16 So that's the second thing.

17 And it's --

18 Q. Go ahead.

19 A. Go ahead.

20 Q. Go ahead. Finish. 03:10:11

21 A. And then the third is, just because
22 Google, in -- in Knittel's world, if I understand
23 it correctly, he's saying Google could not know or
24 did not know the SWAA-off/SWAA-on status for iOS
25 14 and beyond. 03:10:43

1 That, in my opinion, does not alleviate 03:10:44
2 Google's promise, if you will, to those that click
3 SWAA off. They shouldn't be able to just put
4 binders on and say, oh, we couldn't know this
5 information; therefore, we have no -- we have no 03:11:09
6 duty to uphold someone's SWAA-off status.

7 Q. Okay. Well, I think you disclaimed
8 expressing any expert opinion, at least, in the
9 case about what Google or should or shouldn't do,
10 right? 03:11:30

11 A. That is correct.

12 Q. Okay. So let's stick to -- let's stick
13 to our hypotheticals and our assumptions and leave
14 what Google should and shouldn't do out of it for a
15 minute. 03:11:38

16 You said, as a technical matter, that
17 Google could still have known after iOS 14.5 the
18 SWAA status of its users who use iOS devices.

19 What is the basis for your understanding?

20 A. The basis of my understanding is that -- 03:11:54
21 through discussions with Mr. Hochman.

22 Q. When did you have those discussions?

23 A. That was after I reviewed Mr. Knittel's
24 report.

25 Q. Who was present for those discussions? 03:12:12

1 A. I don't recall as I sit here. I know 03:12:17
2 Mr. Hochman and I were.
3 Q. Was there a lawyer?
4 A. Yes.
5 Q. Who? 03:12:23
6 A. Probably -- probably Alex.
7 Q. Frawley?
8 A. Frawley, probably.
9 Q. So what did Mr. Hochman tell you about
10 Google's ability to determine the SWAA status of 03:12:39
11 iOS users after iOS 14.5?
12 A. So my understanding is that there is a
13 device -- some way to do some device-level
14 information that Google could get that would enable
15 them to determine whether or not the SWAA-on or 03:12:58
16 SWAA-off statuses were on.
17 Q. Do you have any further understanding
18 other than what you just said?
19 A. No, it was -- it's technical. He -- he
20 said it's possible they could have known. 03:13:14
21 Q. Okay.
22 A. Meaning -- "they" meaning Google.
23 Q. Right. Understood.
24 Did you read the named plaintiffs' 03:13:39
25 depositions in this case?

1 A. I flipped through them. I didn't read 03:13:42
2 them word for word, but I did flip through at least
3 some of them.

4 Q. Would you agree that their own words is
5 at least a useful data point in how consumers value 03:13:54
6 their sWAA-off data?

7 A. I -- I don't believe that that's
8 necessarily probative, but I would have no reason
9 to believe that it isn't something that one could
10 look to. 03:14:28

11 Q. Did you do anything in this case to
12 model, estimate or study how consumers would have
13 responded at the start of the class period if
14 Google had fully disclosed what Plaintiffs alleged
15 it failed to disclose about sWAA? 03:14:57

16 A. I did not do a consumer study, if that's
17 what you're asking. My understanding is -- from my
18 job from a monetary -- from a monetary compensation
19 standpoint is I have accepted the premise that
20 Google didn't do that. 03:15:22

21 Q. So have you done anything to analyze, as
22 an expert, what would have happened in the but-for
23 world if Google had disclosed that sWAA off would
24 work the way that it works according to
25 Mr. Hochman? 03:15:51

1 MR. LEE: Objection. Form. Vague. 03:15:53

2 THE DEPONENT: I -- I did not do any. I
3 did not do an analysis of that sort, if that's what
4 you're asking me.

5 Q. (By Mr. Santacana) Okay. 03:16:20

6 A. I did not.

7 Q. Okay.

8 Returning to iOS 14 for a moment,
9 assume for me that Google cannot decipher the SWAA
10 status of a user on an iOS device who does not 03:17:12
11 consent to it.

12 Okay?

13 A. Well, can you repeat that? Because now
14 I've lost you.

15 Q. Assume that Google cannot decipher the 03:17:22
16 SWAA status of a user on an iOS device who does not
17 consent to that.

18 A. Are you -- are you specifying a SWAA-off
19 user then?

20 Q. It's a SWAA-off user, but they do not 03:17:35
21 consent to Google obtaining their device
22 identifier.

23 And so I'm asking you to assume that, as
24 a result, Google is disabled from understanding
25 that user's SWAA status. 03:17:50

1 A. Okay. 03:17:54

2 Q. Okay. Is it fair to say that for some of
3 the conversions that you measure in Scenario 1 as
4 unjust enrichment would have been conversions that
5 were initiated or consummated by one of those users 03:18:12
6 I just mentioned?

7 A. I don't -- I don't think so. I -- no.

8 That would not -- that would not have come into my
9 model.

10 Q. Why not? 03:19:05

11 A. Because I have sWAA-off data -- I have
12 sWAA-off data from Google itself. And the starting
13 point with -- the starting point of -- strike that
14 answer. I've got to look at something to make sure
15 that I'm right. 03:19:38

16 Q. Sure.

17 MR. LEE: Take your time.

18 THE DEPONENT: It would -- that would not
19 have come into my analysis.

20 Q. (By Mr. Santacana) Please elaborate. 03:20:31

21 A. So if I understand your question
22 correctly, you're asking me if Google could not
23 know whether a user's sWAA status was off or not
24 because of iOS 14.5 or later.

25 The starting point for every single one 03:20:57

1 of my analyses is a measure of swAA off. And, 03:20:59
2 therefore, if Google did not know -- unless Google
3 reported that -- reported the data erroneously, if
4 Google did not know that it was off, it would not
5 have reported it as off. 03:21:19

6 So that would be excluded from my
7 calculations in every -- in every case.

8 Q. Which schedule are you looking at?

9 A. Well, if you look at -- if you look at
10 Schedule 14.1. 03:21:41

11 Q. I'm there.

12 A. No. I pointed you to the wrong schedule.

13 If you look -- if you look at
14 Schedule 13.1, this data is taken directly from
15 Google's own representation of swAA-off accounts. 03:22:13

16 Now, that -- that analysis then -- that
17 analysis then, for example, goes into my App Promo
18 signed-in swAA-off revenue calculations.

19 For example, if you go to Schedule 2.2 of
20 my analysis. So -- 03:22:50

21 Q. Got it.

22 MR. LEE: Wait. I think he's still --

23 THE DEPONENT: So just -- just -- so the
24 very end, the very bottom of that schedule, it says
25 "Share of Monthly Accounts with swAA Off," and it 03:23:11

1 makes a multiplication. 03:23:17

2 So Google has to know that there is sWAA
3 off.

4 Q. (By Mr. Santacana) So sticking with 03:23:23
5 Schedule 2.2, and I see you're on the row "Share of
6 Monthly Accounts with sWAA Off."

7 You say those percentages came from
8 Google, right?

9 A. Well, the data that goes into those 03:23:36
10 percentages came from Google.

11 Q. And that was -- sorry -- Schedule 13.1?

12 A. Yes.

13 Q. So let's stick with 13.1.

14 What you did was you took monthly active
15 accounts for each year in the stub of 2016, and you 03:23:58
16 performed a calculation of those with sWAA off as
17 compared to those with sWAA enabled, and came up
18 with your percentage of monthly accounts with sWAA
19 off, right?

20 A. Correct. 03:24:18

21 Q. That last column, then, those percentages
22 then get plugged into 2.2?

23 A. For example, yes. They go other places
24 in my schedule as well.

25 Q. Yeah. 03:24:30

1 So do you understand the origin of this 03:24:31

2 "Monthly Active Accounts" data that you're relying
3 on here in Schedule 13.1?

4 A. Yes.

5 Q. What is it? 03:24:42

6 A. I mean, this is when you -- when you say
7 "the origin," you mean that this is produced
8 data -- data that was produced by Google.

9 Q. So these are monthly accounts with SWAA
10 enabled or turned off produced by Google from 03:25:13
11 Google's records of Google accounts, right?

12 A. That's my understanding.

13 Q. For each one of these years, there's more
14 accounts than there are people in the U.S. because
15 some people have more than one account, right? 03:25:29

16 A. That's my understanding.

17 Q. Okay.

18 A. But -- but let's just be clear. For each
19 of one of these years, there's not necessarily more
20 than there are people in the U.S. In some years, 03:25:37
21 there are less.

22 I mean, if you look at the number of
23 active accounts in 2016, there's 215 million
24 accounts. I believe that there's more than
25 215 million people in the U.S. 03:25:50

1 Q. I'm on Schedule 13.1. Where are you? 03:25:54

2 A. I'm -- oh, I'm on Schedule 13.2. 13.2 is
3 the data that feeds this.

4 Q. Okay. This is very helpful. Thank you.

5 Yeah. So these are U.S. active accounts, 03:26:11
6 and it's every month, which you rolled up into 13.1
7 for -- by year, right?

8 A. Just for -- just for clarity's sake, it's
9 every month with the exception of 9/1/2022 through
10 12/1/2022. 03:26:35

11 Q. Okay.

12 A. And in those years, that data was not
13 produced -- I'm sorry -- those months, that data
14 was not produced. So then I held that data
15 constant. 03:26:47

16 Q. Okay. Got it.

17 So what makes you think that these
18 figures on number of accounts exclude iOS users?

19 A. I -- I -- no, I don't -- I don't think
20 that they -- I don't think that the number of
21 accounts exclude iOS users. 03:27:13

22 My understanding of your question -- my
23 understanding of your question was, would iOS
24 users come into -- would iOS users, after 14.5,
25 come into my calculations, if -- if I understood 03:27:36

1 your previous question correctly. 03:27:42

2 Q. Right.

3 A. Okay.

4 Q. You're -- to be clear, when you say

5 "calculations," what I mean is, are there 03:27:49

6 conversions that you say the revenue from which

7 should be disgorged that come from iOS 14.5 or

8 later users who did not consent to share their

9 identity with third parties.

10 But go ahead. 03:28:10

11 A. My understanding of -- of the

12 hypothetical is that -- the premise here is that

13 Google does not know whether their sWAA is off or

14 not.

15 Q. At the time that they are using an app on 03:28:29

16 their iOS device, of course Google knows for all

17 of its Google accounts if sWAA is on or off at any

18 given time, as you point out in 13.2.

19 A. Uh-huh.

20 Q. But in the moment where the user is using 03:28:45

21 an iOS device, and they happen to have a Google

22 account, and they happen to see an ad on an

23 AdMob-enabled app on an iOS device in iOS 15,

24 and they convert, are you proposing to disgorge

25 that conversion? 03:29:04

1 A. It seems like a very complex 03:29:53
2 hypothetical. I'm not 100 percent sure if I can
3 answer it as I sit here. I'd have -- I'd have to
4 think about that more.

5 Q. Let me see if I can make it less 03:30:03
6 complicated. Sorry.

7 I think you said the technical limitation
8 at issue started with iOS 14.5?

9 A. That is my understanding.

10 Q. Okay. So the Internet says that was 03:30:19
11 released in April 2021. I don't know if that's
12 true, but let's just assume for a minute that's
13 true. Okay?

14 Assume further that, starting in April of
15 2021, though Google knows the SWAA status of their 03:30:38
16 users in their Google account, when their users use
17 an iOS device, Google is disabled from knowing
18 that they are a Google user and that they have a
19 SWAA status at all by Apple's operating system.

20 In your calculations of conversion 03:31:01
21 measurement revenue that should be disgorged, are
22 there -- is there conversion measurement revenue
23 post April 2021 that you're proposing be disgorged
24 in the situation where Google doesn't know its
25 users are using an iOS device or that they have a 03:31:18

1 SWAA-off status? 03:31:30

2 A. Answering to the best of my ability as I
3 sit here, that would be likely be in. But I'm
4 not -- I can't just -- as I sit here, I'm not
5 100 percent sure. That could take me, like, hours 03:31:46
6 to figure out for sure if that's -- if that's right
7 or not.

8 Q. Okay. To be clear, you did not attempt
9 at any point in your analysis to exclude post iOS
10 14 users' conversions from the denominator of 03:32:02
11 conversion measurement revenue that you were
12 looking at for disgorgement, right?

13 A. I -- that is correct. I did not.

14 Q. If the Court were to rule that Google was
15 not obligated to honor the SWAA setting of a user 03:32:29
16 on iOS who had not consented to be identified by
17 a third party, like Google, wouldn't you need to
18 cut out the conversions that would have been
19 consummated in those situations from your
20 Scenario 1 damages figure? 03:32:55

21 MR. LEE: Incomplete hypothetical.

22 Answer if you can.

23 THE DEPONENT: I -- I don't know the
24 answer to that, because I can't -- because I would
25 have -- I would have to go back. I would have to 03:33:14

1 try to figure that out. I can't -- I did not cut 03:33:16
2 out any iOS users. I said that they may likely
3 be in, but I am not 100 percent sure. I would have
4 to -- I would have to analyze that. I can't answer
5 that as I sit here. 03:33:28

6 Q. (By Mr. Santacana) Why aren't you sure?
7 If you didn't cut them out, then they must be in,
8 right?

9 A. They are highly likely in, but I'm not --
10 I would need to -- I just need to understand that 03:33:37
11 hypothetical a little bit better to make sure that
12 they were, in fact, in.

13 I don't -- I can't think of a reason as
14 sit here that they're not in, but they may not be
15 in. 03:33:48

16 The information is certainly available.
17 I've made estimates as to iOS -- non- -- in my
18 calculations, if one were to need to cut certain
19 things out, one could do -- one could do that based
20 on market share percentages and shared-in 03:34:05
21 percentages. That's -- that's available if, in
22 fact, it were necessary.

23 Q. Fair enough.
24 And as you know, you have an opportunity
25 to review the transcript and correct errors. If 03:34:16

1 you conclude that this testimony is erroneous, of 03:34:18
2 course you can always correct that.

3 That's not a question. You're just --

4 A. Well, no. I'm not -- I'm not thinking
5 that any of my testimony is erroneous. 03:34:29

6 Q. I know. No, no, no. I know.

7 I'm saying, you'd need you hours to check
8 to be sure. So if you choose to take the time to
9 check and conclude that what you've just said is
10 wrong, you will have a chance to correct that. So 03:34:41
11 you don't need to be worried about it right now.

12 MR. LEE: Yeah, he's not trying to trick
13 you or anything.

14 THE DEPONENT: No, no, no. No. I'm just
15 saying -- I'm just saying the hypothetical to begin 03:34:50
16 with, my understanding is not -- is not accurate
17 because I understand that Google knows how to check
18 or has the ability to check their -- the SWAA
19 status. But --

20 Q. (By Mr. Santacana) Well, let me -- 03:35:06

21 A. But you're saying if they didn't check,
22 and they weren't allowed to check, then I would
23 need to -- I'd need to analyze that.

24 Q. Yeah.

25 So that's -- all I'm saying is, you think 03:35:16

1 it's highly likely you included that. That's fine. 03:35:17

2 I understand you think it should be included.

3 I'm just saying, if later you conclude

4 that you did deduct it somehow -- you counted for

5 it in some way or the numbers you used 03:35:30

6 automatically accounted for it -- you'll have a

7 chance to put that on the record.

8 A. I understand that.

9 Q. Okay. All right. Let's switch gears for
10 a sec. 03:35:45

11 So you used these percentage in --

12 A. Can you just -- now what we are talking
13 about, these percentage here now?

14 Q. In Schedule 13.1.

15 A. Okay. 03:35:57

16 Q. Is what I was about to say.

17 To apply a discount in Schedule 2.2 from
18 signed-in App Promo revenue net of acquisition
19 costs, from that, you discount by the share of
20 monthly accounts with SWAA off, right? 03:36:43

21 A. Yes.

22 Q. You were provided with other measurements
23 in this case and calculations relating to the
24 proportion of online traffic that is WAA-off and
25 SWAA-off traffic, correct? 03:37:02

1 A. I think -- I think you're talking about 03:37:08
2 an interrogatory response.

3 Q. I am.

4 A. Yes, I know -- I know the document that
5 you're talking about. 03:37:14

6 Q. Did you review that document in preparing
7 your expert opinion?

8 A. Yes.

9 Q. Why didn't you rely on it in estimating
10 the SWAA-off share of App Promo revenue? 03:37:32

11 A. If it's the document that I'm thinking
12 of, that document is riddled with erroneous
13 information.

14 If -- I believe that it's a random -- it
15 purports itself to be a random sample of a certain
16 number of days over the period -- over the period. 03:37:53

17 It has -- and, again, I'm going from
18 memory here. But it has certain situations where I
19 believe it said that SWAA-on was 100 percent. It's
20 got a lot of null values in it. And so that data
21 ultimately is, in my opinion, very suspect. 03:38:12

22 Whereas this data here that I'm relying
23 upon seems like it came from a more reliable source
24 given the nature of the information that was
25 provided, as well as the consistency and -- the 03:38:38

1 consistency of the data and the expectations one 03:38:46
2 would have from reviewing an analysis like -- like
3 this.

4 Q. So as I understand it, in a nutshell, you 03:39:07
5 found the monthly accounts with SWAA-off data to be
6 more complete and reliable than the WAA-off traffic
7 information that was provided in the interrogatory?

8 A. Yes, that is -- that is correct.

9 Q. Those two sets of data were measuring 03:39:28
10 different things, fair to say, right?

11 MR. LEE: Objection to form.

12 THE DEPONENT: Yeah, they -- they were 03:39:49
13 measuring different things to some extent, yes.
14 One was measuring users, if that's what you're
15 talking about, and one was measuring traffic.

16 Q. (By Mr. Santacana) If the interrogatory
17 data you're referring to -- one second.

18 MR. SANTACANA: I'm just going to mark it
19 to make this easier.

20 (Exhibit 3 was marked for identification 03:40:10
21 by the Court Reporter and is attached hereto.)

22 Q. (By Mr. Santacana) But while we wait for
23 that, if the -- do you at least agree with
24 Mr. Knittel that if you had an accurate and
25 reliable measure of the share of ad traffic that 03:40:31

1 was sWAA-off traffic that that would be a better 03:40:34
2 way to discount App Promo revenue in Schedule 2.2
3 than the way you did it?

4 MR. LEE: Objection to form.

5 THE DEPONENT: Well, no. 03:40:51

6 Q. (By Mr. Santacana) Why not?

7 A. Well, in my -- the way that I did it, I
8 relied on the most reliable data. And I understand
9 the hypothetical to be, if this other data that
10 you're saying that may pop up at some point were 03:41:12
11 more reliable, would -- would one use that.

12 I don't know the answer to -- to how much
13 more reliable it's going to be. I don't know if
14 it's going to be as reliable as this data.

15 I do know that, in fact, there are other 03:41:28
16 measures in the record which seem to indicate that
17 WAA-off/sWAA-off users or WAA-off users are -- had
18 about the same amount of traffic or maybe even a
19 little bit more traffic than WAA-off users.

20 MR. LEE: Than WAA-on users? 03:41:46

21 THE DEPONENT: Than WAA-on users.

22 And so this data -- this data here I know
23 is -- is reliable. And so -- and coupled with the
24 fact that I've seen those other documents in the
25 record, I'm comfortable using this data. 03:42:05

1 If there were other traffic data that's 03:42:09
2 in the record that I viewed to be reliable, that's
3 something I'd have to look. But I don't know if it
4 would be as reliable or more -- I'd just have to
5 understand that. 03:42:19

6 And -- and I don't have that information
7 because there was no other data in the record
8 related to traffic.

9 Q. (By Mr. Santacana) Look at paragraph 89
10 of your report. 03:42:32

11 You there?

12 A. Yes.

13 Q. This is the paragraph of your report
14 where you discuss the apportionment factor that you
15 applied for sWAA-off users which came from Schedule
16 13.1, right? 03:43:03

17 A. Yes.

18 Q. In the Footnote 166 --

19 A. Yes.

20 Q. -- you say, "As detailed on schedule
21 13.1, I determined the average share of sWAA-off
22 accounts for each annual period." [as read] 03:43:18

23 There's a parenthetical.

24 "The apportionment factor for 2022
25 reflects monthly data," et cetera, et cetera, 03:43:36

1 et cetera.

03:43:37

2 You describe the calculation.

3 A. Yes.

4 Q. In this footnote and in this

5 paragraph 89, you do not discuss the other 03:43:43

6 documents you were just referencing relating to the

7 proportion of ads traffic that is SWAA-off traffic,

8 right?

9 A. Relative to SWAA on?

10 Q. Yes.

03:44:05

11 A. I don't, no. That's correct.

12 Q. Do you discuss those anywhere in this

13 report?

14 A. I don't know that -- I don't know that I

15 do.

03:44:19

16 Q. Did you rely on those documents that you

17 were just talking about that discuss SWAA-on and

18 SWAA-off traffic shares in rendering your opinion

19 about how much of a discount you should apply to

20 App Promo revenue for SWAA-off traffic?

03:44:38

21 A. I don't know that I relied on those

22 documents.

23 Q. If you had relied on them, wouldn't you

24 have cited them here?

25 A. I would have cited them -- if I had

03:44:51

Page 166

1 relied on them, then I would have cited them in my 03:44:52
2 report, or at least I would have attempted to.

3 I try to be as complete with documents
4 that I rely upon --

5 Q. So is it -- 03:45:02

6 A. -- for this analysis.

7 Q. Is it fair to say that those documents
8 did not form the basis of your conclusion that
9 these apportionment factors in Figure 21 for the
10 adjusted share of monthly accounts with SWAA off 03:45:12
11 were accurate?

12 I can try it again.

13 A. Yeah, I'm not quite sure now what you're
14 asking.

15 Q. Is it fair to say that those documents 03:45:31
16 did not form the basis of the -- strike that.

17 Let me try it a completely different way.

18 I'm looking at page 32 of your report,
19 paragraph 89, 90, Figure 21, the footnotes.

20 This is where you conclude what 03:45:57
21 apportionment factor to apply App Promo revenue to
22 adjust for SWAA-off users, right? SWAA-off
23 revenue, I should say.

24 A. This is where I write about what I --
25 where I write about it. 03:46:16

1 Q. This is where you explain your reasoning? 03:46:17
2 A. That is correct.
3 Q. And in that explanation, you do not say
4 that your conclusion is supported by other
5 documents other than the ones cited here, right? 03:46:27
6 A. That is accurate. I do not say that in
7 that particular -- in those particular paragraphs.
8 Those other documents did not go specifically into
9 my calculations.
10 Q. Fair enough. 03:47:23
11 As a conceptual matter, your goal in
12 paragraph 89 and the supporting schedules is to
13 determine the proportion of Google's App Promo
14 revenue attributable to sWAA-off users, right?
15 A. To -- attributable to -- yeah, signed-in 03:47:50
16 sWAA-off users, net of traffic acquisition costs.
17 That's accurate.
18 Q. Is it fair to say that an assumption of
19 your conclusion in paragraph 89 is that sWAA-off
20 and sWAA-on users do not differ materially in how 03:48:08
21 they interact with the Internet or with ads?
22 A. As I sit here, I think that that's fair
23 to say. I haven't made an adjustment for any
24 material differences between WAA-off or sWAA-off
25 users as it relates to revenue for App Promo or for 03:49:32

1 any of the other calculations that I have made, 03:49:36
2 with the exception of what we're just talking about
3 here.

4 Q. Take a look at Figure 15 of your report, 03:49:51
5 the [REDACTED] [REDACTED] we've been discussing.
6 There's a note in a black box on that slide that
7 you rely on.

8 Would you just read that into the record
9 for me?

10 A. "Note: This data is based on an 03:50:11
11 assumption of linear distribution. However,
12 initial data indicates that heavy year-to-date
13 users are more likely to consent (see
14 following slide). Therefore this data most likely
15 overstates the impact." [as read] 03:50:28

16 Q. And just one correction. The "YT" there,
17 you're sure that that refers to year to date as
18 opposed to YouTube?

19 A. I am sorry. Yes. Heavy -- I should
20 just -- let me reread it. 03:50:42

21 "Note: This data is based on an
22 assumption of linear distribution. However,
23 initial data indicates that heavy YT users are more
24 likely to consent (see following slide). Therefore
25 this data most likely over states the impact." 03:50:57

1 Q. And the following slide of that 03:51:06
2 document -- well, let me -- strike that.

3 Do you have any basis to dispute that
4 note on that slide relating to the conclusion that
5 heavy YouTube users are more likely to consent to 03:51:17
6 GAP?

7 A. No, I don't have a basis to disagree with
8 that.

9 Q. So it is at least possible that, in the
10 context of this case, when we're talking about 03:51:28
11 SWAA-on and -off users that their usage patterns
12 may also differ depending on which type of user
13 they are?

14 A. Based on the data I saw that -- it's not
15 accurate -- that it would -- they do not differ. 03:51:48

16 Q. What data is that?

17 A. There was -- there was a document, and I
18 don't -- I don't recall that document. There was a
19 document, though, that seemed to indicate that
20 traffic -- that SWAA-off traffic was similar to 03:52:06
21 SWAA-on traffic, at least for certain periods.

22 Q. Ads traffic or Internet traffic or
23 analytics traffic? What kind of traffic?

24 A. I don't recall as I sit here.

25 Q. Okay. Ads traffic would be the relevant 03:52:31

1 one, right? 03:52:33

2 A. I would think that they would be related.

3 Ads traffic and app traffic would be related.

4 Q. But ads traffic is what you'd really want 03:52:49

5 to know, right?

6 A. I think that's the most accurate, yes.

7 Q. Because in effect what you're trying to

8 do is figure out how much of Google's advertising

9 revenue is coming from SWAA-off users. If you

10 would wave a magic wand and know that, that's the 03:53:08

11 number you would use?

12 A. How much their advertising revenue or --

13 and/or conversion tracking revenue that relates to

14 advertising, yes. If I knew that number, that's

15 the number I'm trying to accurately calculate. 03:53:28

16 Q. Okay. And, again, you don't recall which

17 document you're referring to that lead you to

18 believe that SWAA-on and SWAA-off users have

19 similar --

20 A. No. 03:53:43

21 Q. -- quantities of traffic?

22 A. I -- I can't recall the Bates number. I

23 can't recall it off the top of my head, no.

24 Q. All right. Take a look at Exhibit 3 for 03:53:57

25 me.

1 A. I'm there. 03:54:20

2 MR. LEE: Page 3?

3 MR. SANTACANA: I'm on page 16,

4 Exhibit 3.

5 MR. LEE: Got it. Thanks. 03:54:29

6 MR. SANTACANA: Let me know when you're
7 there.

8 MR. LEE: Just give me a second.

9 THE DEPONENT: Page 16, you said?

10 Q. (By Mr. Santacana) Yup. 03:54:47

11 A. Okay. Okay. I'm there.

12 Q. Okay. Here you see the table "ACI WAA
13 Opt-out (SampledAdEventsQueries) - Impressions."

14 A. Yes.

15 Q. And at the end of the table, which is on 03:55:30
16 page 17, just to take the -- the final number, May
17 2022, in the column "WAA Opt-out Rate on Google
18 Display Advertising Stack," it's 1.57 percent,
19 right?

20 A. It is, yes. 03:55:53

21 Q. And in your corresponding measurement for
22 2022, your -- actually, let me just pause there for
23 a second.

24 Keep scrolling to -- I think this is
25 missing something. 03:56:24

1 In any case, that's the WAA opt-out rate 03:56:27
2 according to this data. Your corresponding number
3 for 2022 for sWAA opt-out was 13 percent, right,
4 and change? 13.87 percent.

5 A. If you're asking me does this number say 03:57:05
6 1.57 percent, this relates to WAA and not sWAA.

7 Q. Yes. I'm getting you the sWAA one in a
8 moment?

9 A. So that's -- it's not -- I don't have a
10 corresponding number to this in my analysis. 03:57:18

11 Q. I see. Okay.

12 Let's get the other one, then, and we'll
13 look at that one.

14 MR. LEE: Mike, how are you feeling in
15 terms of energy? Do you need to stretch your legs? 03:58:03
16 We've been going about 55 minutes.

17 THE DEPONENT: Yeah, I mean, I think we
18 just took that one short break. So I guess soon, I
19 wouldn't mind taking a break.

20 And unfortunately, it's warming back up 03:58:10
21 in here again too.

22 MR. LEE: That's sort of what I was
23 thinking is it's just -- some fresh air outside.

24 MR. SANTACANA: Let's take a break.

25 MR. LEE: I can sense you're getting 03:58:21

1 warm. 03:58:23

2 THE VIDEOGRAPHER: This marks the end of
3 Media No. 4. Off the record. The time is 3:57.

4 (Recess taken.)

5 THE VIDEOGRAPHER: This marks the 04:06:47
6 beginning of Media No. 5 in the deposition of
7 Michael Lasinski. We are back on the record. The
8 time is 4:06.

9 (Exhibit 4 was marked for identification
10 by the Court Reporter and is attached hereto.) 04:06:54

11 Q. (By Mr. Santacana) Okay. Take a look at
12 Exhibit 4.

13 A. Okay.

14 Q. So the sWAA figures start at page 21,
15 U.S. only sWAA opt-out. 04:07:29

16 A. Page 21?

17 Q. Yup. And the numbers really are at the
18 end of the table.

19 A. Okay.

20 Q. Okay. So back to that question I was 04:08:53
21 asking earlier. You see here, May 2022, "sWAA
22 Opt-out Rate on Google Display Advertising Stack,"
23 9.39 percent.

24 Do you see where I'm at?

25 A. I do see that, yes. 04:09:11

1 Q. That number, if it were accurate, would 04:09:13
2 correspond to the 13.87 percent in your report at
3 Figure 21?
4 A. No, it would not.
5 Q. Why not? 04:09:33
6 A. I mean, I think if I'm -- if I understand
7 this data correctly, this is SWAA opt-out rate on
8 the advertising stack -- I think -- I think, if I
9 understand this correctly, what -- what you're
10 asking here, is would that replace my 04:10:03
11 13-point-some -- some-odd percent.
12 Q. Yeah.
13 A. Is that what you're asking?
14 Q. Yeah.
15 A. I mean, if one were just to 04:10:14
16 mathematically change this, I think what you would
17 have to do here is -- I'm just going to be sure.
18 I think -- I think what you would have to
19 do is also get rid of the share of revenue from
20 signed-in users deduction, because I don't think 04:10:56
21 that this information calculates a signed-in cut,
22 if I understand it correctly.
23 Q. I think I understand what you're saying.
24 You think the denominator from which the
25 9.39 percent in Exhibit 4 on page 23 was calculated 04:11:24

1 includes signed-out ad impressions? 04:11:29

2 A. Right.

3 Q. Okay.

4 A. So you would have to eliminate that

5 signed -- it's my understanding of this data, if I 04:11:38

6 understand it correctly -- and it's been a while

7 since I've tried to analyze it. But my

8 understanding is that this would actually

9 include -- the denominator includes signed out.

10 Q. Yeah. 04:11:54

11 A. So it would double count it if you had 04:11:54
12 both.

13 Q. Okay. I think I understand what you're 04:11:54
14 saying. That's very helpful.

15 All right. Let's switch gears. Let's 04:12:09
16 talk about conversion measurement for a minute.

17 I think you said earlier that -- I think 04:12:09
18 you distinguished earlier revenue that Google makes
19 from placing advertising from revenue that Google
20 makes from conversion measurement.

21 Is that -- did I mishear you?

22 A. No, I think that there are -- there is -- 04:12:28
23 there are distinct revenue pockets.

24 Q. What is the difference between those two 04:12:44
25 revenue pockets?

1 A. What I understand is that there are 04:12:46
2 situations in which Google charges based on a
3 specific conversion event, an actual conversion.
4 And then my -- I also understand that
5 Google uses conversion tracking information to 04:13:01
6 inform its algorithms that it uses in its analysis,
7 if you will, for bidding for ads, advertisers
8 bidding for ads.
9 Q. In what situations does Google charge
10 based on a specific conversion event? 04:13:32
11 A. My -- my understanding is that there
12 are -- my understanding is that there are certain
13 situations where advertisers can pay for their
14 campaigns when customers actually convert on the
15 app's -- on the app's website or the app. 04:14:37
16 Q. What are you reading from there?
17 A. I'm reading from my own report, and I'm
18 on page 9.
19 Q. Okay. Okay.
20 On page 9, at the top, this is the 04:15:08
21 tail-end of paragraph 23, you say "Advertisers can
22 choose to finance their campaigns based on
23 conversions, paying Google 'when customers convert
24 on the advertiser's website or app.'"
25 And the phrase -- what I should have said 04:15:24

1 is "paying Google," quote, when customers convert 04:15:31
2 on the advertiser's website or app, closed quote.

3 And there, you are quoting a Google Ads
4 help page titled "Use pay for conversions in
5 Display campaigns," right? 04:15:46

6 A. That is correct.

7 Q. And it's on that basis that -- that you
8 just testified that you understand that there are
9 certain situations where advertisers can pay for
10 campaigns when customers actually convert on the 04:15:59
11 app?

12 A. Yeah, that basis as well as there are
13 other documents in the case that seem to indicate
14 that.

15 Q. One question I have is, do you know the 04:16:09
16 extent to which that is possible for App Promo
17 campaigns?

18 A. I do not.

19 Q. So the denominator of revenue that you
20 use for Scenario 1, which is the App Promo revenue 04:16:44
21 scenario, is the full revenue from App Promo,
22 right?

23 A. Yes. Yes.

24 Q. And then -- and then you deduct from that
25 a number of things to account for signed in, SWAA 04:16:57

1 off, costs, et cetera? 04:17:00

2 A. That is correct.

3 Q. Did you make any deduction for App Promo
4 campaigns where the advertiser does not pay per
5 conversion?

6 A. No, I did not. I did not need to. 04:17:09

7 Q. Why not?

8 A. Because when I made my final deduction,
9 that -- I did not need to make a deduction for that
10 because the information I used would have -- the
11 information I used would not have required that
12 deduction. 04:17:27

13 Q. Why not?

14 Was the information you used limited to
15 pay-per-conversion campaigns? 04:17:46

16 A. No.

17 Q. So was there something in the information
18 you used that helped you limit your revenue
19 denominator to pay-for-conversion campaigns?

20 A. No, because I used -- in my calculation, 04:18:03
21 I actually used the share of revenue attributable
22 to conversion-type bids, not conversion -- not
23 pay-for-conversion campaigns.

24 Q. What are you reading from?

25 A. I'm reading from Schedule 2.1. 04:18:19

1 Q. Okay. So you're referring to the step in 04:18:28
2 your analysis where you discounted App Promo
3 revenue to account for the proportion of App Promo
4 revenue where the conversions were measured by

5 Google Analytics for Firebase as opposed to some 04:18:42
6 other conversion measurement tool?

7 A. That were attributable to that, yes.

8 Q. And sorry. Which schedule?

9 A. That's Schedule 2.1.

10 Q. Sorry. One second. 04:19:03

11 And in Schedule 2.1, what you were just
12 reading off was "Share of Revenue Attributable to
13 Conversion Types Bid Against GA4F," right?

14 A. That is correct, yes.

15 Q. Which is -- the origin of which is 04:19:31
16 Google's "Supplemental Response to Interrogatory
17" at pages 15 and 16?

18 A. Correct.

19 Q. Okay. Let's take a look at that. So
20 open up Exhibit 4 again. 04:19:49

21 So at the bottom of page 15 in Google's
22 response --

23 MR. LEE: Just give me one second.

24 MR. SANTACANA: Sure.

25 MR. LEE: Bottom of 15? 04:20:34

1 MR. SANTACANA: Uh-huh. 04:20:37

2 MR. LEE: Okay. Are you there too?

3 THE DEPONENT: Yes.

4 Q. (By Mr. Santacana) And I'll just read
5 quickly the interrogatory that was posed, which is 04:20:44
6 at the bottom of page 12.

7 It says, "Please describe all facts
8 concerning the revenue and profits that Google
9 generates or receives related to the collection,
10 storage or use of WAA-off data" -- which is a 04:20:53
11 defined term -- "including for each year during the
12 class period."

13 And there a number of sub-bullets, A
14 through J, with requests for details about that
15 information. 04:21:08

16 So now back to the bottom of page 15. It
17 says, "In a process called attribution" -- that's
18 conversion measurement, right? Same thing?

19 A. Yes.

20 Q. -- "Google serves as an account for the 04:21:22
21 app developer/advertiser, determining if the ad
22 interaction and the conversion recorded by GA4F or
23 by a third-party SDK were made by the same device
24 or user so the developer/advertiser can measure the
25 effectiveness of the ad campaign." 04:21:39

1 Then it says, "Google tracks app campaign 04:21:40
2 ads spend that is bid against different types of
3 conversions. As of last month, approximately
4 55 percent of app campaign ad revenue was
5 attributable to conversion types bid against GA4F 04:21:56
6 (as opposed to other sources of conversions)."
7 With me?

8 A. Yes.

9 Q. Okay. What is your understanding of ad
10 spend bid against GA4F conversions? What does that 04:22:16
11 mean?

12 A. I mean, so what this means is that that's
13 the percentage of ad spend that was bid against
14 different types of conversions.

15 I guess I'm not understanding -- it says 04:22:42
16 it right there. That's, I think, self-explanatory.

17 Q. Does it mean that the advertiser pays per
18 conversion?

19 A. No. In my opinion -- not -- it does not
20 necessarily pay -- it does not pay for conversion 04:23:10
21 there. That's a type of ad that is put forward,
22 and it's not a conversion-based ad, but it's ad
23 spend based on conversion tracking information.

24 Q. So what does it mean to bid against a
25 conversion if it is not paying per conversion? 04:23:39

1 A. So what my understanding there is is 04:23:56
2 bidding against the -- the Google Analytics for
3 Firebase data there at -- it's bidding it in an --
4 based on an algorithm or information available to
5 it. 04:24:10

6 Q. But how is that different from paying per
7 conversion? If they are not paying for conversion,
8 what are they paying for?

9 A. They are paying -- my understanding is
10 that they're -- they're paying for ad placements. 04:24:21

11 Q. Well, if they're paying for placement,
12 then why is this the measure that you chose to use
13 to isolate revenue Google generated from conversion
14 tracking?

15 A. Because -- because without the conversion 04:24:42
16 tracking information, they wouldn't be able to
17 place those bids in that way.

18 Q. Are you sure about that?

19 A. That's my understanding.

20 Q. So what do the other 45 percent that 04:25:03
21 advertise then do if they don't measure conversions
22 with GA4F?

23 A. I don't know what the 45 percent do. I
24 didn't look into that.

25 Q. Suffice it to say they're measuring 04:25:20

1 conversions some other way? 04:25:22

2 A. Certainly they may be.

3 Q. For example, in the prior paragraph, it
4 says that the conversion can be recorded by GA4F or
5 by a third-party SDK, right? 04:25:42

6 A. It does, yes.

7 Q. It cites some documents, including a
8 document from Google, telling people how to use
9 AppsFlyer and Kochava to measure conversions,
10 right? The prior paragraph. 04:25:54

11 A. It does, yes.

12 Q. Are you familiar with AppsFlyer and
13 Kochava?

14 A. I am not, no.

15 Q. So if the advertiser is paying Google to 04:26:22
16 place the ad but, as you say, they wouldn't be
17 allowed to track the conversion using Google, why
18 in Scenario 1 do you conclude that they simply
19 wouldn't place the ad rather than track the
20 conversion some other way? 04:26:44

21 MR. LEE: Sorry. Who is the "they" in
22 that sentence?

23 MR. SANTACANA: The advertiser.

24 THE DEPONENT: I -- I think if -- in that
25 case, I'm not sure that Google -- well, Google 04:26:58

1 needs to charge them for that ad. So Google needs 04:27:08
2 to track the ad and track the conversion.

3 So it's -- it's Google's side that I'm
4 looking at here, not the advertiser's side.

5 So if the advertiser wants to use another 04:27:19
6 mechanism to track conversions, they may be able
7 to. But I still think that Google, in this case,
8 tracks that -- tracks that as well.

9 Q. (By Mr. Santacana) You think that Google
10 tracks conversions regardless of whether -- you 04:27:38
11 think that Google tracks conversions and App Promo
12 campaigns regardless of whether the advertiser uses
13 GA4F?

14 MR. LEE: Mischaracterizes.

15 THE DEPONENT: No. If they use GA4F, 04:27:53
16 they do.

17 Q. (By Mr. Santacana) Right. But
18 45 percent don't, right?

19 A. I -- again, I don't know the answer to
20 that. If 45 percent don't, yeah. If 45 percent 04:28:05
21 don't. But 55 percent, at least -- at least at the
22 end, do.

23 Q. So how is Google making money on the
24 45 percent?

25 A. That's not something that I investigated. 04:28:16

1 That's not part of -- I -- my understanding is 04:28:18

2 that's not relevant to the case.

3 Q. Why not?

4 A. Because my understanding is that this --

5 that this would relate to Google's tracking. And 04:28:26

6 Google's tracking would happen through, in some

7 cases, GA4F, or in some cases GMA SDKs.

8 Q. Right.

9 So Scenario 1 is focused on GA4F, and --

10 well, no. Strike that. 04:28:46

11 Your Scenario 1 is focused on the
12 measurement of the conversion; and Scenario 2 is
13 focused on the service of the ad?

14 Is that -- am I right about that?

15 A. Yes. 04:29:00

16 Q. So, again, sticking with Scenario 1 and
17 measurement of the conversion, you posit that if
18 Google couldn't measure the conversion, then it
19 could not make the ad revenue that it makes for App
Promo campaigns, right? 04:29:09

21 A. Correct.

22 Q. You posit that if the 55 percent of ad
23 spend that currently uses Google to measure
24 conversions suddenly were told you can't use Google
25 to measure these conversions for SWAA-off users 04:29:23

1 that they would simply not measure conversions? 04:29:25

2 A. Who's "they"?

3 Q. The advertisers.

A. Well, the advertisers may measure

5 conversions, but Google would not be able to 04:29:38
6 measure conversions.

7 Q. So why can't the advertiser continue to
8 measure the conversions and continue to place ads
9 with Google if what they are paying for is the
10 placement of the ads?

A. But then Google would not be able to

12 charge for those conversions. Google -- Google
13 wouldn't know that there were conversions. Google
14 doesn't -- Google wouldn't have the information.

15 Q. So the 45 percent that don't use GA4F, 04:30:00

16 Google collects no revenue from that?

17 A. No, I didn't say that.

18 Q. Well, then, what you just said cannot
19 possibly be true.

A. Yes, it can. 04:30:12

21 Q. Advertisers pay to place advertising with
22 Google, right?

23 A Yes

24 Q. I give you money; you place the ad,
25 right?

Page 187

1 A. Correct. 04:30:23

2 Q. I can measure whether the ad converted

3 using a Google tool, right?

4 A. That's my understanding, yes.

5 Q. I can also measure whether the ad 04:30:34

6 converted using a nonGoogle tool, right?

7 A. That maybe accurate.

8 Q. And I can use the nonGoogle tool to

9 integrate with Google Ads so that the nonGoogle

10 party tells Google when I get a conversion, right? 04:30:48

11 MR. LEE: Objection to form.

12 THE DEPONENT: I don't know -- I don't

13 know the answer to that. That's beyond the scope

14 of my technical ability.

15 Q. (By Mr. Santacana) Okay. Well, assume 04:31:02

16 for me that that's possible, or even common.

17 Why do you posit that the measurement of

18 the conversion by Google, as opposed to some other

19 party, is a but-for cause of the revenue?

20 A. Because -- because that -- because Google 04:31:29

21 used the data, the information that it had

22 gotten -- that it had gotten inappropriately, to

23 actually measure those conversions. And -- and

24 this is the amount of data that they used to do

25 that. 04:31:48

1 Q. I understand that completely. 04:31:48

2 My question is, in the but-for world --
3 so you agree with me that -- let's back up for a
4 second.

5 Okay? 04:31:58

6 A. Sure.

7 Q. Advertisers, when they place ads tell
8 Google when they want an App Promo campaign that
9 they want a certain kind of conversion, right?

10 A. That -- that certainly is possible. 04:32:17

11 Q. Well, aren't you assuming that in this
12 opinion?

13 A. Yes. Yes.

14 Q. It's not possible. It's what you believe
15 to be true? 04:32:34

16 A. Correct.

17 Q. So they also tell Google to serve a
18 particular creative, right? Here's the language
19 that should be in my ad, right?

20 A. I -- I don't know -- I don't know what 04:32:48
21 advertisers do at that level.

22 Q. Why did you choose conversions rather
23 than impressions as the focus of your disgorgement
24 of profit Scenario 1?

25 A. Because my understanding is that Google 04:33:29

1 would not have access to the conversion data when 04:33:30

2 SWAA is off.

3 Q. So part of the assumption behind
4 Scenario 1 of your disgorgement of profit opinion
5 is that if Google could not have used SWAA-off data 04:33:48
6 to measure conversions, then it would have been
7 impossible to measure the conversions from the ads
8 that were served?

9 A. I'm not saying -- I don't think I made
10 the assumption that it would have been impossible 04:34:09
11 but, in fact, that that's what they did. That's
12 what they used the data for, to measure the
13 conversions. And, therefore, they would not --
14 they used that data to generate that revenue. They
15 used SWAA-off users' data to generate that revenue. 04:34:31
16 That, I calculate in Scenario 1.

17 Q. Google used SWAA-off data to measure
18 conversions in App Promo campaigns, right?

19 A. That is my understanding, correct.

20 Q. Your task was to determine how much 04:35:09
21 profit Google made thanks to its use of that
22 SWAA-off data to measure conversions, right?

23 A. In part, yes.

24 Q. You told me that advertisers pay to place 04:35:24
25 advertisements, right?

1 A. Correct. 04:35:26

2 Q. They're not paying per conversion in

3 these App Promo campaigns, right?

4 A. There may be some situations in which

5 they do. But certainly, there are some situations 04:35:34

6 in which they're not.

7 Q. How can you attribute the entirety of the

8 ad revenue for the placement of an ad campaign to

9 the use of SWAA-off data to measure conversions

10 when the payment is for the placement of ads? 04:36:19

11 A. Because -- for two reasons.

12 One, when Google analyzes its conversion

13 revenue -- its conversion revenue, tracker revenue,

14 it eliminates that revenue as it -- as it did in

15 the ads impact document. 04:36:49

16 And so applying a similar methodology

17 here for App Promo, as well as AdMob and

18 Ad Manager, makes sense.

19 Q. The document you're referring to, that's

20 the ChromeGuard study? 04:37:07

21 A. That is correct.

22 Q. Is there any other bases or situation --

23 is there any other measurement like that that

24 Google has performed that you're referring to here?

25 A. Above and beyond the ChromeGuard study? 04:37:19

1 They may have. That's the one that I'm aware of 04:37:21
2 that's available in this case. I don't know if
3 they've done other studies as well.

4 Q. Okay. So here's what I don't understand.

5 An advertiser can pay Google to place 04:37:46
6 advertising for an App Promo campaign and not rely
7 on GA4F to measure conversions from that campaign,
8 right?

9 A. That certainly may be possible.

10 Q. Do you have any reason to doubt that 04:38:10
11 that's true?

12 A. No, I do not.

13 Q. So given that, why do you assume that the 04:38:22
14 ability to measure conversions with Google's
15 product is a but-for cause of the ad spend as
16 opposed to something else?

17 MR. LEE: Asked and answered.

18 THE DEPONENT: I think -- I think I
19 answered that before.

20 Google used that information to track 04:38:32
21 that revenue, to -- to generate -- to analyze and
22 track that revenue. And, therefore, they should
23 not have been able to, because they should not have
24 had that information.

25 Q. (By Mr. Santacana) But how do you know 04:38:52

1 it's not a completely irrelevant piece of 04:38:53
2 information?

3 MR. LEE: Objection.

4 Q. (By Mr. Santacana) So, for example, an 04:39:01
5 advertiser places an ad campaign. They don't just
6 say "Use GA4F to track conversions." They also
7 say, "Here's my phone number and my contact."
8 Okay?

9 Google presumably keeps those phone 04:39:12
10 numbers in a database.

11 If a Court ruled that Google's not 04:39:21
12 allowed to keep the phone numbers for the
13 advertisers in a database, would you conclude that
14 all of the ad revenue would have been ill-gotten,
15 because if they didn't have the phone number, then
16 they couldn't have run the ad?

17 It would be ridiculous, right?

18 A. I don't even understand what you're
19 talking about at that point.

20 Q. I don't really understand what you're 04:39:33
21 talking about either.

22 MR. LEE: Same objection.

23 Q. (By Mr. Santacana) I mean, it would be a 04:39:39
24 ridiculous thing to say that the phone number of
25 the contact at the advertiser is a but-for cause of

1 the advertising revenue, right? 04:39:41

2 MR. LEE: Objection. Improper and
3 incomplete hypothetical. Lack of foundation.

4 THE DEPONENT: I -- I don't understand
5 what you're talking about. 04:39:50

6 Q. (By Mr. Santacana) In order to disgorge
7 profit, there needs to be a connection between the
8 alleged unlawful conduct and the profit that's
9 being disgorged, right?

10 A. That is my understanding, yes. 04:40:05

11 Q. A causal connection, right?

12 A. That is my understanding.

13 Q. So when you have done a patent
14 infringement case, and you do a disgorgement of
15 profit analysis, and there's an infringing
16 component of a larger product -- right? You with
17 me so far? 04:40:18

18 A. I think so, yes.

19 Q. The job of the damages expert in that
20 situation is to determine the proportion of profit
21 for the whole product that the infringing component
22 contributed, right? 04:40:30

23 A. I mean, in -- in a royalty case, that is
24 correct.

25 Q. Sometimes the component is really 04:40:49

1 important, so important that you couldn't even sell 04:40:50
2 the device if it weren't for that component which
3 infringes, right? In which case, damages would be
4 the whole revenue for the infringing product?

5 A. I'm not sure that that's accurate. But I 04:41:07
6 don't even know -- I guess if you're talking about
7 a sales -- two-competitor -- a two-competitor
8 market, that could be possible.

9 Q. Sometimes a component is completely 04:41:18
10 unimportant. It happens to infringe, but the
11 seller could have used any number of the other
12 options, right?

13 There's lots of RAM chips. If this one
14 infringes, we'll use a different one. I still
15 would have sold my laptops, just as many as I would 04:41:28
16 have otherwise, right?

17 You hear what I'm saying?

18 A. I do understand what you're saying.

19 Q. So why doesn't that same analysis apply
20 here? 04:41:38

21 How -- where -- where in here did you
22 evaluate whether the ability to measure conversions
23 with a Google tool is more like the RAM chip in a
24 laptop that doesn't really drive the revenue or is
25 more like some component that can't -- that you 04:41:57

1 can't live without? 04:42:02

2 How do you know that's what's driving the

3 revenue?

4 MR. LEE: Incomplete hypothetical. Asked 04:42:10

5 and answered.

6 You can answer again.

7 THE DEPONENT: I don't even know if I --

8 if I said yes to you or no to you, based on all the

9 things that just happened, if I'd be agreeing with

10 you or disagreeing with you. 04:42:23

11 I think we're -- I guess I'm just not

12 understanding where you're trying to go. You had

13 like a four-paragraph question, so...

14 And I want to you know, take a break at

15 some point again. 04:42:36

16 MR. LEE: Yeah.

17 THE DEPONENT: It's getting hot again in

18 here.

19 MR. LEE: I agree. It's got to be like

20 85 degrees in here. 04:42:41

21 MR. SANTACANA: Okay. Well, can we

22 just -- can we just finish this quick, then? I'll

23 be quick.

24 Q. (By Mr. Santacana) To put it a different

25 way, if at the start of the class period Google had 04:42:52

1 said, "You may not use Google Analytics for 04:42:56
2 Firebase to track conversions on App Promo
3 campaigns."

4 Okay? At all. Not allowed. We're 04:43:08
5 discontinuing the product.

6 A. Okay.

7 Q. Is it -- doesn't it follow from your
8 analysis here that all App Promo advertising would
9 immediately cease?

10 A. So are you asking me to assume that -- 04:43:28

11 MR. LEE: Let me object as improper and
12 incomplete hypothetical first.

13 THE DEPONENT: Okay.

14 MR. LEE: Calls for speculation. Lack of 04:43:41
15 foundation.

16 Go ahead.

17 THE DEPONENT: That Google would -- would
18 tell people to use other...

19 Q. (By Mr. Santacana) Yeah.

20 A. To use other and not -- and not live up 04:43:48
21 to their promise on the SWAA data, and still give
22 those --

23 Q. No. Let me try again.

24 MR. LEE: Well, let him finish, and then
25 we can try again. 04:44:03

1 THE DEPONENT: Well -- okay. 04:44:03

2 Q. (By Mr. Santacana) Imagine that at the

3 start of the class period, Google said, "Hey, App

4 Promo advertisers, we're getting out of the

5 analytics game. No more GA4F. Not for sWAA-on 04:44:14

6 users, not for sWAA-off users, not for anybody.

7 Goodbye GA4F."

8 Right? You with me so far?

9 A. Yes.

10 Q. You have percentages here on conversion 04:44:26

11 types bid against GA4F which you rely on, right?

12 A. Yes.

13 Q. Is it -- are you saying that Google's ad

14 revenue for App Promo campaigns would drop by the

15 percentages that were bid against GA4F in those 04:44:41

16 years if Google discontinued GA4F?

17 A. Well, that didn't happen.

18 Q. I understand.

19 A. So I don't know -- I don't know what

20 would happen. 04:44:52

21 Q. Well, you're trying to determine how much

22 profit Google made, right, from this component,

23 which is alleged to be unlawful, as opposed to

24 other things?

25 A. Which I did. 04:45:05

1 Q. So I'm just trying to understand how you 04:45:06
2 know that this component is what drove the revenue
3 and not other things. Because I don't see in your
4 report anywhere where it says, "This component is
5 the but-for cause of the revenue." 04:45:17

6 A. Well, if you looked at the ads impact
7 document, it's a very similar calculation to what I
8 make.

9 Q. ChromeGuard?

10 A. For ChromeGuard, which would be 04:45:31
11 applicable here in this particular case.

12 So -- so, therefore, that -- when -- when
13 Google is doing its own economic analysis, that's
14 how it looks at it.

15 And so I think following, when Google 04:45:44
16 is -- is doing its own economic analysis, doing
17 something similar for when it's trying to calculate
18 a change in revenue due to a privacy setting is
19 appropriate.

20 MR. LEE: Now I'm going to actually say 04:46:03
21 that we're taking a break, because his neck is
22 getting red, and his ears are getting red.

23 And I know we don't want him to be
24 uncomfortable. He asked for a break a while ago.
25 So let's go off the record. 04:46:12

1 MR. SANTACANA: Sure. It was one 04:46:14
2 question ago, but sure.
3 THE VIDEOGRAPHER: Off the record. The
4 time is 4:45.
5 (Recess taken.) 04:46:19
6 THE VIDEOGRAPHER: This marks the
7 beginning of Media No. 6 in the deposition of
8 Michael Lasinski. We are back on the record, the
9 time is 5:09.
10 Q. (By Mr. Santacana) When we left off, you 05:10:03
11 had mentioned the ChromeGuard study.
12 Do you recall that?
13 A. Correct.
14 So on what basis did you conclude that
15 the measurements done in the ChromeGuard study were 05:10:22
16 analogous to the measurement you were trying to
17 accomplish here?
18 MR. LEE: Objection to form. Vague as to
19 "here."
20 THE DEPONENT: So in ChromeGuard -- in 05:10:45
21 the ChromeGuard study, it analyzes a privacy
22 setting in Display that will be a Chrome -- a
23 privacy setting in Display that will affect revenue
24 based on conversion tracking information.
25 My understanding here, similarly, is 05:11:21

1 there would not be conversion tracking information 05:11:24
2 available for SWAA-off users, and this relates to a
3 privacy setting as well, as -- as well as relating
4 to Display.

5 Q. (By Mr. Santacana) By "Display," you 05:11:49
6 mean the Google Display Network for advertising?

7 A. Yes.

8 Q. Now ChromeGuard is related to the
9 Google Display Network advertising on Web browsers,
10 right? 05:12:01

11 A. Correct.

12 Q. And it is a study related to the impact
13 of changing certain settings in Chrome's incognito
14 mode?

15 A. That is correct, yes. 05:12:13

16 Q. On what basis did you conclude that the
17 change in privacy settings in the ChromeGuard study
18 is analogous to the change in how SWAA works in
19 this case?

20 A. My understanding of -- in that -- in that 05:13:00
21 case, meaning the ChromeGuard study, is it also --
22 is there also is -- the information would be
23 limited on Google's ability to conversion track
24 for -- when someone is in incognito mode.

25 I was informed in this case that with 05:13:30

1 SWAA off, Google would not be able to conversion 05:13:32

2 track as well. And so for that particular data
3 point that I was using here, they are similar.

4 Q. Understood.

5 The ChromeGuard study was evaluating not 05:13:50
6 just what would happen if Google were disabled from
7 conversion tracking in incognito mode, but if all
8 conversion tracking from anyone was disabled in
9 incognito mode, correct?

10 A. I believe that that is accurate. 05:14:16

11 Q. It was a study to determine what would
12 happen to Google's ad revenue if conversion
13 measurement were impossible in incognito mode by
14 any party, company or third-party cookie; is that
15 fair? 05:14:36

16 A. I don't know the specifics of that.

17 Q. Let me ask it differently.

18 The assumption behind the ChromeGuard
19 study, as you understand it, was that there would
20 be no third-party cookies in incognito mode, 05:14:54
21 whether they belonged to Google or to some other
22 third party.

23 Fair to say?

24 A. I believe that that is accurate, yes.

25 Q. Whereas here, the plaintiffs do not 05:15:09

1 allege that advertisers should be disabled from
2 using third parties to track conversions. They
3 only allege that Google should be disabled from
4 tracking them.

05:15:11

5 Is that fair to say?

05:15:24

6 A. I do believe that that is the case.

7 Q. And you assumed that in your analyses,
8 that the specific conduct that is alleged to be an
9 unlawful in the case is Google's conversion
10 tracking for purposes of your Scenario 1 damages
11 figure.

05:15:44

12 You do not assume in Scenario 1 that
13 advertisers would be disabled from using
14 third parties to measure conversions, correct?

15 A. That is correct. I do not assume that.

05:16:02

16 Q. What, if anything, did you do to account
17 for that distinction between the ChromeGuard study,
18 where third parties are disabled from doing
19 conversion tracking, and your Scenario 1, where
20 they are not disabled from doing conversion
21 tracking?

05:16:16

22 A. Well, as we talked about, in this -- as I
23 looked at -- I look at ChromeGuard -- ChromeGuard.

I looked at the information provided to me for App Promo that talks about Google's

05:16:29

1 conversion tracking for GA4F. 05:16:33

2 (Discussion off the stenographic record.)

3 THE DEPONENT: So I know that -- I know

4 what are those rates are. We -- I had that

5 information. Google provided it to me, and we 05:16:51

6 provided it to the case, and we've already talked

7 about that.

8 Here, if you look at -- if you look at

9 the ChromeGuard study, it's at 52 percent.

10 52 percent is number that is similar to what GA4F 05:17:06

11 is at the end, based on the end of its information.

12 There -- I think it's at 55 percent. This is

13 52 percent.

14 So that seemed like a reasonable

15 percentage to me. 05:17:21

16 Q. (By Mr. Santacana) What are you looking

17 at right now? Figure --

18 A. I'm not --

19 Q. -- 28?

20 A. I wasn't actually looking at anything. I 05:17:27

21 have it open to Figure -- to Figure 28, but I

22 wasn't looking at anything as I was answering that.

23 Q. Okay. Well, I'd like to look at the

24 52 percent you're referring to.

25 Can you pull that up for me? 05:17:39

1 A. It's -- I have it in Figure 28. 05:17:47

2 Q. Okay. In Figure 28, which is screenshot
3 of a ChromeGuard study document --

4 A. Yes.

5 Q. -- there's a red box around "52 percent," 05:18:14
6 parentheses, "conversion-based autobidding
7 proportion."

8 Is what you're referring to?

9 A. Yes.

10 Q. And -- sorry. Could you just explain to 05:18:28
11 me what you believe that 52 percent represents in
12 the context of the ChromeGuard study?

13 A. Well, what that 52 percent represents is
14 the impact -- the overall approximate revenue
15 impact ratio to Display ads for conversion-based 05:18:47
16 autobidding. And that is in the -- in the context,
17 as the document says, of conversion tracking.

18 Q. So there's three numbers under the
19 heading "overall approximate revenue impact ratio
20 to Display Ads." 05:19:15

21 A. Yes.

22 Q. The first number is 0.5918 percent.

23 A. Yes.

24 Q. What do you understand that number to
25 represent? 05:19:23

1 I think it's right -- 05:19:23
2 A. Yeah. I was going to say, if I remember
3 correctly, that's the fraction of traffic that was
4 going to be impacted.
5 Q. By what? 05:19:36
6 A. By ChromeGuard.
7 Q. Okay. So 0.5918 percent of total traffic
8 would be impacted by the blocking of all
9 third-party cookies on Chrome's incognito mode?
10 A. I think -- I don't -- I don't have all 05:19:58
11 the documents underlying this. But I think that
12 that relates to Display ad traffic.
13 I think -- I think if you look at all
14 traffic, I think it was higher than that for
15 this -- for ChromeGuard. 05:20:17
16 Q. Display ad traffic. And the 52 percent
17 represents the proportion of that traffic that
18 what?
19 A. The 52 percent represents the revenue
20 impact to Display ads. 05:20:42
21 Q. Are you sure?
22 A. Yes. For that traffic.
23 Q. Isn't the revenue impact the third
24 number, approximately 0.3 percent?
25 A. No. Well, yes and no. 05:21:08

1 The 52 -- the 52 percent is the actual 05:21:10
2 revenue impact, but you have to multiply it by the
3 amount of traffic -- the amount of actual revenue
4 that's flowing through that traffic, if you will,
5 to calculate that -- the revenue impact -- the 05:21:22
6 ultimate revenue impact to Google Displays overall.

7 That calculation, those steps of the
8 calculation, are similar to what I perform in my
9 calculations to get down to the impacted revenue.

10 For -- just to be clear, for Scenario 1. 05:21:49

11 Q. The 52 percent has, in parentheses behind
12 it, "conversion-based autobidding proportion."

13 What is the "conversion-based
14 autobidding"?

15 A. My understanding is that that's 05:22:12
16 autobidding that is based upon conversion
17 information that Google gets from tracking -- from
18 tracking conversions.

19 Q. Is it your assumption that the 52 percent
20 represents autobidding based on conversion tracking 05:22:52
21 performed by Google, or autobidding based on
22 conversion tracking performed by anyone?

23 You understand my question?

24 A. Yeah, I understand your question, I 05:23:37
25 think.

1 From -- from my analysis in SWAA off, I 05:23:37

2 did not need to make a calculation of that.

3 Here, I used 52 percent because I do 05:24:20
4 believe that that's an appropriate number for
5 Google's conversion tracking information for AdMob
6 and Ad Manager.

7 Q. Sorry. I'm not -- I don't understand 05:24:35
8 your answer. I'm just -- I'm going to repeat my
9 question, and maybe you can help me understand your
10 answer.

11 Is it your assumption that the 52 percent 05:24:52
12 in this ChromeGuard study screenshot represents
13 autobidding based on conversion tracking performed
14 by Google, or autobidding based on conversion
15 tracking whether it's performed by Google or a
16 third party?

17 A. In this case, I'm -- I'm -- the way I'm
18 using it, I'm using it is performed by Google.

19 Q. How do you know that that's what that 05:25:03
20 number means?

21 A. I believe that it's an accurate number to
22 use in this case and that that's what this number
23 means, because if you look at the data that's
24 available on conversion tracking for App Promo and
25 you look at the conversion tracking information for 05:25:30

1 Firebase that we were -- that we were looking at 05:25:32
2 before, that number turns out to be about 5 --
3 55 percent in -- in a similar time period.
4 And so this -- applying this number, this
5 52 percent number, for AdMob as well as for Ad 05:25:46
6 Manager seems like a reasonable assumption.
7 Q. Your conclusion that it's a reasonable
8 assumption is that 55 percent and -- is based on
9 the fact that 55 percent and 52 percent are close
10 in number? 05:26:13
11 A. Yes. I mean, they're -- they're similar.
12 And so that seems like it's an appropriate
13 approximation in this case.
14 Q. So on the Web, Google Display ads can be
15 placed and paid for in a variety of ways, right? 05:26:44
16 A. I believe that that's accurate.
17 Q. That includes, for example, cost per
18 click, right?
19 A. I believe that that's accurate.
20 Q. It can include cost per impression? 05:27:02
21 A. I believe that that's accurate as well.
22 Q. It can include cost per conversion?
23 A. Correct.
24 Q. And there are other ways to pay as well,
25 right? 05:27:20

1 A. That's consistent with my understanding. 05:27:24

2 Q. How do you know that the 52 percent in

3 the Figure 28 is not meant to account for the

4 proportion of ad revenue on the Web from the

5 Google Display Network that is based on cost per 05:27:49

6 conversion as opposed to one of the other methods I

7 just mentioned?

8 A. Could you repeat that question?

9 Q. How do you know that the 52 percent in

10 Figure 28 is not meant to account for the 05:28:13

11 proportion of ad revenue on the Web from

12 Google Display Network based on cost per conversion

13 as opposed to some other method of billing for ads,

14 like cost per click?

15 A. Well, this document starts off with 05:28:30

16 conversion tracking. It's -- it's calculating

17 conversion tracking revenue.

18 Q. I agree.

19 A. Based on conversion tracking.

20 Q. But I think that you testified that you 05:28:40

21 believe the 52 percent is tied to the proportion of

22 ad revenue on Google's Display Network where the

23 conversion was measured by a Google product, a

24 Google cookie, right?

25 MR. LEE: Objection to form. 05:29:01

1 Mischaracterizes. 05:29:02

2 THE DEPONENT: I don't think I testified
3 to that.

4 Q. (By Mr. Santacana) Okay. Are you under
5 the impression that the 52 percent is the 05:29:05
6 proportion of Google Display revenue on the Web
7 where a conversion was measured by a Google cookie?

8 A. I -- my understanding is that it could
9 be -- it certainly could be measured by a Google
10 cookie. That's correct. 05:29:26

11 Q. But also included in the 52 percent are
12 conversions measured by a third-party cookie that
13 is not a Google cookie, correct?

14 A. That is my understanding, yes.

15 Q. Okay. And the reason that, in 05:29:40
16 ChromeGuard, that was a fair figure to use for
17 apportionment was that all conversion tracking,
18 whether by a Google cookie or a third-party
19 nonGoogle cookie, would be blocked, right? That's
20 the variable they were testing? 05:30:12

21 A. That is my understanding, if I remember
22 correctly.

23 Q. But you've testified that in Scenario 1,
24 the measurement of conversions by third-party SDKs
25 would not be blocked, correct? 05:30:26

1 A. My -- 05:30:31

2 MR. LEE: Objection to form.

3 Mischaracterizes.

4 THE DEPONENT: My understanding is that

5 they would not be necessarily be blocked. That is 05:30:36

6 correct.

7 Q. (By Mr. Santacana) Now, in your

8 Scenario 1, you rely on the fact that, as a

9 historical matter, 55 percent of ad spend -- and

10 there are other numbers for each year, but let's 05:30:59

11 just use 55 percent for the most recent year --

12 55 percent of ads spend was attributable to

13 conversions bid against GA4F, right?

14 A. That is correct. I do use that in my

15 calculation. 05:31:14

16 Q. And so that helped you determine

17 accurately, as a historical matter, how much

18 revenue you believe is attributable to Google's

19 conversion measurements using GA4F in App Promo

20 campaigns, right? 05:31:34

21 A. Maybe I'm misunderstanding what you're

22 trying to ask, but Google provided that information

23 itself. So it's not an assumption of mine. Google

24 actually provided that information, the amount of

25 revenue that's attributable to GA4F conversions. 05:31:48

1 Q. Well, maybe we're using the word 05:31:53

2 "attributable" in different ways.

3 You conclude that that is a fair way to

4 determine how much of Google's revenue from App

5 Promo campaigns is attributable to the alleged

6 unlawful conduct, right?

7 A. Yes, that is correct. For App Promo.

8 Q. Did you do anything to consider how much

9 revenue Google would have made if it had not been

10 able to measure conversions using GA4F? 05:32:34

11 A. Well, I leave that revenue -- you know,
12 revenue that is not related to GA4F, I -- is
13 untouched in my analysis under Scenario 1.

14 Q. As a historical matter. I understand.

15 My question is: Did you take the 05:32:57
16 additional step in your report of analyzing what
17 would have happened in the but-for world if Google
18 had not been permitted to measure conversions using
19 GA4F?

20 Did you do anything to think about that 05:33:14
21 as a methodological exercises?

22 A. So you're saying shut off GA4F
23 completely?

24 Q. For SWAA users.

25 A. Well, I haven't seen anything in the 05:33:34

1 record that would indicate that that's something 05:33:35
2 that they're doing.

3 Q. Well, I understand that --

4 A. So --

5 Q. -- but, for example, Mr. Hochman opines 05:33:41
6 that that's what Google should do, right?

7 So I'm just asking, have you -- have you
8 done anything to measure what would happen in the
9 world if that happened?

10 A. I'm not aware of an alternative scenario 05:33:57
11 that one would use to measure that if that were to
12 happen. So I did not measure that.

13 Q. Okay. And you are aware -- let's --
14 let's take Mr. Hochman's opinion -- you've read his
15 report, right? 05:34:12

16 A. Yes, I did. But I -- to say that I'm
17 aware of Mr. Hochman's opinions will probably
18 require me to go back and look at Mr. Hochman's
19 report.

20 Q. Well, I'm not going to get too deep into 05:34:22
21 it. I'm just interested right now in his opinion
22 near the end of his report where he says going
23 forward, Google could just stop measuring
24 conversions from SWAA-off users. Okay?

25 Have you done anything to consider, if 05:34:37

1 Google did that, what would happen to Google's ad 05:34:41
2 revenue?

3 A. I mean, the information that I'm
4 reading -- that I've read in this case indicates
5 that that's not something that Google is going to 05:35:05
6 do. They, in fact, think that it's -- GA4F is
7 critically important to them going forward. So I
8 don't think that that's something that they're
9 going to do.

10 I have not measured an impact of what 05:35:18
11 would do if that, in fact, did happen, if they shut
12 off GA4F.

13 Q. Right. Okay.

14 I mean, you understand that one of the
15 things that Mr. Hochman is saying is the Court 05:35:30
16 could order Google to not measure conversions from
17 SWAA-off users, right?

18 I mean, the plaintiffs alleged that's
19 illegal, so the Court may say, "Don't do that
20 anymore," right? 05:35:44

21 A. The Court may say that.

22 Q. Okay. So if the Court were to do that,
23 don't measure conversions for SWAA-off users
24 anymore, it's illegal, what, in your mind, would
25 happen to the ad spend that formerly had been spent 05:36:06

1 and bid against GA4F conversions? Would it 05:36:11
2 disappear?

3 A. I mean, that's a hypothetical that I
4 don't need to calculate. If, going forward, they
5 don't use it, my damages calculation only goes up 05:36:28
6 through 2022. So if they don't -- don't use it in
7 the future, I'm not -- I have not analyzed what
8 would happen in that case.

9 Q. Have you analyzed that question with
10 respect to what would have happened if a Court had 05:36:45
11 issued that ruling at the start of the class
12 period?

13 A. My -- no. My -- my assumption -- not my
14 assumption.

15 My assignment here is to calculate what 05:37:05
16 Google, in fact, did do. And they use -- oh, I
17 think you used ill-gotten information or something
18 like that. They used the ill-gotten information to
19 actually track conversions --

20 Q. Right. 05:37:19

21 A. -- during the period.

22 Q. Right.

23 A. And I calculated the profit associated
24 with that.

25 Q. So you did not see it as part of your 05:37:26

1 assignment to measure the proportion of Google's 05:37:28
2 App Promo revenue that was garnered thanks to the
3 ill-gotten data as opposed to other factors, like
4 quality of the ad service, or the speed of the ad
5 network, or other metrics that Google can provide? 05:37:51

6 A. I did not -- I did not analysis other
7 metrics. I looked at what the actual ill-gotten
8 gains were in this case.

9 Q. And you did not see it as part of your
10 assignment to analyze how Google advertisers or 05:38:10
11 users would have responded to a change in
12 circumstances at the start of the class period
13 where a Court ordered that Google could not measure
14 conversions using GA4F for swAA-off users?

15 That was not part of your assignment, 05:38:36
16 right?

17 MR. LEE: You mean other than Scenario 1?
18 Maybe I'm not following.

19 MR. SANTACANA: I'm not either.

20 Q. (By Mr. Santacana) Can you answer my 05:38:47
21 question?

22 A. I just don't even know -- if you're not
23 following your own question, I don't know how to
24 answer it, then.

25 Q. No. I'm following Mr. Lee's attempt to 05:38:52

1 testify for you. 05:38:55

2 Did you see as part of your assignment to
3 analyze how Google advertisers -- excuse me -- how
4 Google advertisers or users would have responded to
5 a change in circumstances at the start of the class 05:39:08
6 period where Google was no longer able to use
7 WAA-off data to measure conversions?

8 MR. LEE: I have the same question and
9 objection.

10 THE DEPONENT: I have not analyzed that 05:39:23
11 with the exception of what I did for my scenarios,
12 Scenario 1 and Scenario 2.

13 Q. (By Mr. Santacana) So okay.

14 With respect to Scenario 1, how -- what
15 was the result of your analysis as to how Google 05:39:37
16 would have responded to that change of
17 circumstances? What do you conclude Google would
18 have done in that situation?

19 A. I have not made a conclusion about what
20 Google would have done. I analyzed what they 05:39:53
21 actually did do.

22 Q. And what did you conclude as to what
23 advertisers would have done in those changed
24 circumstances at the start of the class period?

25 A. I analyzed what -- what the actual world 05:40:12

1 was, not what they -- not what they would have done 05:40:14
2 in some different but-for world.

3 Q. And what did you conclude, if anything,
4 as to what users would have done in those changed
5 circumstances at the start of the class period? 05:40:24

6 A. I mean, ultimately, I analyzed what they,
7 in fact, did do. Now, I don't even know what
8 the -- what the hypothetical means, what users
9 would have done in that case.

10 Q. Okay. So you didn't reach any 05:40:49
11 conclusions about whether and how users would
12 change their behavior in a situation, at the start
13 of the class period, where the Court had said
14 Google cannot measure conversions with GA4F for
15 sWAA-off users? 05:41:06

16 There's no opinions about that in your
17 report, right?

18 MR. LEE: I'm sorry. You lost me. Can
19 you ask that one more time?

20 THE DEPONENT: So I'm trying to 05:41:15
21 understand what you're saying.

22 MR. LEE: I need to hear the question one
23 more time.

24 MR. SANTACANA: Do you have real time?

25 MR. LEE: I don't. 05:41:22

1 MR. SANTACANA: Can you pull it up? 05:41:23

2 MR. LEE: I don't have real time.

3 MR. SANTACANA: You're just not paying
4 for it?

5 MR. LEE: I don't use real time as a 05:41:26
6 practice.

7 MR. SANTACANA: Okay. Well, I need you
8 to use either real time or --

9 MR. LEE: I think I've asked you to
10 repeat a question maybe twice today, so -- 05:41:30

11 MR. SANTACANA: I don't agree with you.

12 MR. LEE: You have real time. Do you
13 want to hand it to me, and I can read it again? Or
14 you can just reask the question as a courtesy to
15 me. I'd appreciate it. I need to know whether to 05:41:39
16 lodge an objection or not.

17 Q. (By Mr. Santacana) You didn't reach any
18 conclusions about whether and how users would
19 change their behavior in a situation at the start
20 of the class period where the Court had said Google 05:41:50
21 cannot measure conversions with GA4F for sWAA-off
22 users?

23 MR. LEE: Same objections as before. And
24 asked and answered.

25 THE DEPONENT: I believe I answered that, 05:42:11

1 but I don't know -- I don't really follow that 05:42:12
2 hypothetical, because that did not happen. So I'm
3 not sure --
4 Q. (By Mr. Santacana) I know it didn't 05:42:18
5 happen.
6 A. -- how to answer that.
7 Q. So Google would have --
8 A. I don't understand, like, how would
9 Google have communicated this information to users?
10 Q. (By Mr. Santacana) My question is just, 05:42:28
11 that's not part of your opinions in the case,
12 right? I just want to understand the limits of
13 your opinions.
14 You did not undertake that assignment?
15 MR. LEE: Same question. Same objection. 05:42:37
16 THE DEPONENT: Of -- of what?
17 Q. (By Mr. Santacana) Of how users' 05:42:53
18 behavior would have changed, if at all, in the
19 situation at the start of the class period where
20 the Court ordered that Google could not use
21 SWAA-off data to measure conversions with GA4F?
22 A. I -- I think I'm following the
23 hypothetical. I don't -- I did not --
24 Q. Okay.
25 A. -- measure that. 05:43:12

1 Q. It's not -- it's not a trick question. 05:43:13
2 A. I'm not --
3 Q. I'm just, like, confirming that that's
4 not something you did, or that you did and you
5 didn't write it down. 05:43:20
6 A. I think -- I think you've read my report,
7 so I'm not trying to trick you either.
8 Q. Okay. Did you discuss conversion-based
9 autobidding with Mr. Hochman?
10 A. Yes. 05:43:48
11 Q. What did he tell you about
12 conversion-based autobidding?
13 Let me withdraw.
14 You're looking at your report. Is it
15 fair to say anything Mr. Hochman told you about 05:44:40
16 conversion-based autobidding is reflected in your
17 report?
18 A. No, it's not.
19 MR. LEE: If you need to consult your
20 report or -- to refresh your recollection about 05:44:53
21 Mr. Santacana's question, feel free to do that. I
22 don't think he's limiting you.
23 THE DEPONENT: I don't know that I
24 identify in my report where Mr. Hochman and I spoke
25 about conversion-based autobidding. 05:45:27

1 Q. (By Mr. Santacana) But you know that you 05:45:33
2 did?
3 A. Yes.
4 Q. Did you document your conversation with
5 Mr. Hochman about conversion-based autobidding in 05:45:40
6 any way?
7 A. Any -- any documentation about -- from
8 any of my discussions with Mr. Hochman is -- is in
9 my report. I didn't -- I don't have any other
10 documents besides my report. 05:46:03
11 Q. Okay. Did you rely on your conversation
12 with Mr. Hochman and what told you about
13 conversion-based autobidding in rendering your
14 opinions?
15 A. I mean -- I mean, yes. And to the extent 05:46:21
16 that they would have flown -- flowed, not flown --
17 flowed into my calculations, I would have
18 identified that in my report.
19 But I can't see where they did
20 specifically flow into my calculations. So I 05:46:52
21 didn't -- I don't know that I have a specific cite
22 back to that discussion, that portion of my
23 discussion with Mr. Hochman.
24 Q. Maybe I misunderstood.
25 But are you saying that yes, you did rely 05:47:09

1 on what Mr. Hochman told you about conversion-based 05:47:12
2 autobidding in rendering your opinions; but no, you
3 did not document where you made that reliance --

4 MR. LEE: Objection.

5 Q. (By Mr. Santacana) -- for what he told 05:47:24
6 you?

7 MR. LEE: Objection. Mischaracterizes
8 his testimony.

9 You can answer again.

10 THE DEPONENT: No. What I'm saying is, 05:47:29
11 to the extent we had a conversation on
12 conversion-based autobidding, I don't have any
13 other documents besides my report.

14 To the extent that it was -- it was -- it
15 would be necessary to document that in my report, I 05:47:47
16 would only see it being -- as being necessary to
17 document in my report if it flowed into my
18 calculations.

19 I don't -- I don't know specifically that
20 that discussion would flow directly into my 05:48:08
21 calculations, so I don't know that -- I don't know
22 if I have a cite in my report that would represent
23 that discussion.

24 Q. (By Mr. Santacana) The 52 percent
25 conversion-based autobidding number we were just 05:48:25

1 talking about in the ChromeGuard study, you had 05:48:29
2 some understanding of that number, and that did
3 flow into your ultimate opinions, didn't it?

4 A. Yes, it did.

5 Q. Was your understanding of that 52 percent 05:48:41
6 conversion-based autobidding number informed at all
7 by your conversations with Mr. Hochman?

8 A. As I'm sitting here, I cannot recall if 05:49:50
9 Mr. Hochman and I talked specifically about the
10 52 percent in this case. I can't -- I can't recall
11 that I did speak to him specifically about
12 52 percent.

13 Q. I appreciate that. My question was a 05:50:02
14 little different, which is, was your understanding
15 of that 52 percent conversion-based autobidding
16 number informed by your conversations with Hochman
17 about conversion-based autobidding?

18 A. Well, the way to answer that is, I -- I
19 talked to Mr. Hochman about conversion-based
20 autobidding. So yes, my -- my general 05:50:25
21 understanding of conversion-based autobidding was
22 based on my discussions with Mr. Hochman.

23 As it relates to that specific document
24 for that specific purpose, I don't recall if I
25 talked to him specifically about that or not. 05:50:45

1 Q. What did Mr. Hochman tell you about 05:50:48
2 conversion-based autobidding?

3 A. I -- I don't remember specifically what 05:51:00
4 he told me versus what I've learned in -- in the
5 case.

6 Q. What do you mean?

7 A. Well, there are -- there is information 05:51:00
8 on conversion-based autobidding in documents in the
9 case.

10 Q. Are you sure about that? 05:51:18

11 A. I believe -- yes, I believe that there
12 are.

13 Q. Have you cited those documents?

14 A. To the extent that I would have relied 05:51:31
15 upon them, yes, I would have cited them.

16 Q. So if none of the documents that you 05:51:54
17 cited contain the phrase "conversion-based
18 autobidding," is it fair to say that none of the
19 documents you cited informed your understanding of
20 conversion-based autobidding?

21 A. That would be fair to say, I think.

22 Q. And if the only document that you cited 05:52:14
23 that contains that phrase is the ChromeGuard study
24 document, and apart from that, your understanding
25 came from your conversations with Mr. Hochman, is

1 it fair to say that I cannot tell from your report 05:52:17

2 what you learned about conversion-based
3 autobidding?

4 A. I don't know the answer to that. I'd
5 have to read my entire report, which I'm happy to 05:52:41
6 do right now, to answer that question.

7 Q. Well, I can tell you that it does not
8 define the term.

9 A. Are you asking me a question?

10 Q. Do you disagree? 05:53:04

11 A. What does not define the term?

12 Q. Your report.

13 A. I don't disagree. It may not define the
14 term.

15 Q. And sitting here now, you cannot recall 05:53:22
16 what Mr. Hochman told you about conversion-based
17 autobidding?

18 A. Not specifically, no.

19 Q. Okay. Your Footnote 219 is on page --
20 sorry. Wrong one. Strike that. 05:54:08

21 Take another look at Figure 28.

22 A. Figure 28 in my report?

23 Q. Uh-huh.

24 A. Okay.

25 Q. Okay. Do you see the references in this 05:54:27

1 ChromeGuard study screenshot to "DV3 traffic"? 05:54:37
2 A. Yes.
3 Q. And to "non-DV3 traffic"?
4 A. Yes.
5 Q. Do you have an understanding of what 05:54:46
6 those terms mean?
7 A. As I'm sitting here, I don't. I don't
8 recall what those terms mean.
9 Q. A little higher there, there's a term
10 "traffic fraction of SSCT plus conversion cookie." 05:55:14
11 A. Yes.
12 Q. What is "SSCT"?
13 A. As I'm sitting here, I don't recall what
14 "SSCT" stands for.
15 Q. What is sitewide tagging? 05:55:46
16 A. I would have to -- if I remember
17 correctly, sitewide tagging relates to the tagging
18 of a website with third-party cookies.
19 Q. Okay. Is there any basis for your
20 conclusion that user behavior with respect to 05:56:40
21 advertising on the Web is analogous to user
22 behavior with respect to advertising on mobile
23 devices?
24 A. Are you talking about my use here of the
25 Display ads estimate -- 05:57:05

1 Q. Yes. 05:57:07

2 A. -- in 52? Yes.

3 Q. What's the basis?

4 A. The basis is that they're both Display 05:57:13
5 ads. And then, in addition to that, as we've
6 talked about before, I looked at -- I looked at
7 conversion -- this conversion-based autobidding
8 number and compared to it the -- the most recent
9 information from the App Promo analysis that I did.

10 Q. And because the numbers were close in 05:57:40
11 number, I guess your intuition told you that it
12 must be pretty similar?

13 A. In part. That is correct in part.

14 Q. And how confident are you that your 05:57:53
15 understanding of the 52 percent number is accurate?

16 A. I'm confident that it's appropriate for
17 this calculation.

18 Q. Okay.

19 MR. LEE: I think we need another break 05:58:20
20 soon. How are you holding up, Mike?

21 THE DEPONENT: Well, I mean, it feels
22 like somebody turned the heat on in here. To be
23 honest, it feels a little unfair.

24 MR. SANTACANA: Okay. We can take a 05:58:32
25 break.

1 THE VIDEOGRAPHER: This marks the end of 05:58:36

2 Media No. 6. Off the record. The time is 5:58.

3 (Recess taken.)

4 THE VIDEOGRAPHER: This marks the
5 beginning of Media No. 7 in the deposition of 06:16:15
6 Michael Lasinski. We're back on the record. The
7 time is 6:15.

8 Q. (By Mr. Santacana) Mr. Lasinski, I want 06:16:30
9 to call your attention to your "Actual Damages"
10 opinion.

11 A. Okay.

12 Q. And just flip to that section of your
13 report.

14 MR. LEE: It's 47.

15 THE DEPONENT: Yup. 06:16:47

16 Q. (By Mr. Santacana) All right. So as we
17 discussed earlier, you determined actual damages as
18 a function of the payments necessary to incentivize
19 a class member to knowingly surrender the choice to
20 keep the activity on their mobile apps private, 06:17:03
21 right?

22 A. That is correct, yes.

23 Q. Do you agree or disagree with Dr.
24 Knittel -- I was informed it's "Knittel."

25 A. Okay. 06:17:19

1 MR. LEE: That changes everything. 06:17:21

2 Q. (By Mr. Santacana) Do you disagree with
3 Dr. Knittel that economic damages should measure
4 the difference between the plaintiffs' economic
5 position if the harmful event had not occurred and 06:17:27
6 the plaintiffs' actual economic position?

7 A. I believe that that's accurate.

8 Q. And just to be clear again on the limits
9 of your opinion, you did not attempt to measure any
10 emotional distress damages, right? 06:17:52

11 A. My -- my understanding of what's
12 necessary here is for me to calculate what is an
13 appropriate price paid to incentivize an individual
14 to knowingly surrender the choice to keep that app
15 activity private. 06:18:24

16 So when I think of that, I think of,
17 you know, what -- what would -- what would an
18 appropriate price be for someone to give up a peace
19 of mind. In other words, if I don't know if I'd
20 call it emotional distress, but I think of it more 06:18:37
21 as like peace of mind for giving up that
22 information.

23 Q. So I just want to be clear. The analysis
24 you conducted here is an economic analysis, right?
25 You're measuring economic damages? 06:18:51

1 A. Monetary damages, correct. Yes. 06:18:54

2 Q. Okay. So if we accept the premise that
3 that and emotional distress damages are different
4 things, would you agree with me that you're not
5 opining on what emotional distress damages would 06:19:06
6 be?

7 A. If -- if you accept the premise that
8 those are different things, then yes.

9 Q. Okay.

10 A. I would agree with that. 06:19:16

11 Q. Are there any other forms of actual
12 damage that you attempted to measure other than
13 what is in your report?

14 A. No, I did not. Nothing more than what is
15 in my report. 06:19:29

16 Q. You did, for example, attempt to measure
17 the cost to class members of the risk of identity
18 theft or some other privacy risk?

19 A. That is correct. I did not.

20 Q. And you did not attempt to measure the 06:19:42
21 cost of a raised risk of data leaks from a data
22 breach?

23 A. That -- that is correct. I did not
24 calculate that.

25 Q. Okay. So -- 06:19:57

1 A. Well -- 06:20:00

2 Q. Go ahead.

3 A. Now, just to be clear, to the extent that
4 people are worried about that, I believe that that
5 is captured in the \$3 here. 06:20:10

6 And so to me, that calculation -- a
7 market-based price captures what a person would be
8 worried about. And those are two things that make
9 sense for a person to be worried about if they're
10 giving up more data. 06:20:24

11 Q. Fair. Fair point.

12 So did you do anything to analyze the
13 named plaintiffs' testimony to determine whether
14 they indicated what a market price would be for
15 their data? 06:20:49

16 A. I did not look at the named plaintiffs'
17 testimony as it related to that.

18 Q. You would agree with me that the best
19 measure of a market price or a fair price here --
20 by the way, "market price" is a term you just used. 06:21:13
21 Is that different from "fair market value" and
22 "fair price," which are terms we described before?

23 A. I think that -- I think "fair price" is
24 different than -- from "fair market value."

25 So I think -- I think, thinking about 06:21:26

1 this, as far as an appropriate price like I 06:21:29
2 described it in my report is the way to -- the way
3 to say it.

4 I may slip up every once a while because
5 I use "market value" and "fair market value" in 06:21:37
6 other contexts. But I'm using what I'm -- what I'm
7 talking about here in my report.

8 Q. Okay. So would you agree with me that
9 the best measure of the fair price in your actual
10 damages opinion is going to be prior economic 06:21:50
11 transactions that are similar to the one that
12 you're hypothesizing?

13 A. Based on data available in this case,
14 yes, I agree that that is -- like the study that
15 I'm relying upon in this case. 06:22:13

16 Q. You are aware that Google Analytics for
17 Firebase is not the only conversion tracking or
18 analytics product on the market for mobile apps?

19 A. I am aware of that, yes.

20 Q. There are others that are produced and 06:22:27
21 serviced by companies other than Google?

22 A. That is my understanding, yes.

23 Q. You're aware that sometimes mobile apps
24 will use multiple analytics products in the same
25 app?

1 A. That is consistent with my understanding. 06:22:43

2 Q. So fair to say at least some of the class
3 members in this class, for example, used apps that
4 used both Google Analytics for Firebase and a
5 third-party analytics solution? 06:22:58

6 A. I don't know if that's fair to say or
7 not. That may have happened.

8 Q. Well, it's a class of 90 million people.
9 Do you have any reason to doubt that that -- some
10 people in the class are in that category? 06:23:14

11 A. No, I do not.

12 Q. People in that category who used an app
13 that used both Google Analytics for Firebase and,
14 let's say, AppsFlyer as an example of a third-party
15 analytics solution, is it fair to say that those 06:23:32
16 people have entered into a transaction with the app
17 that uses both of those analytics solutions, they
18 are giving up data in exchange for using the app?

19 And assume for me that the app is
20 disclosing it, so it is not hidden to them. 06:24:05

21 A. So the app -- the app is disclosing that
22 they're giving up their data in exchange for using
23 the app?

24 Q. Yeah. So, I mean, you use a mobile
25 phone, right? 06:24:21

1 A. Yes, I do. 06:24:22

2 Q. Sometimes you download an app, you
3 install it, you open it up, it says "click here to
4 agree to our privacy policy and terms of use," you
5 say yes, and now you use the app, right? 06:24:30

6 A. Correct.

7 Q. So assume for me that some of those
8 privacy policies disclosed the use of analytic
9 solutions from Google, from other companies,
10 sometimes more than one at once, sometimes just
11 Google, sometimes other companies. Okay? 06:24:41

12 Assume that for the moment.

13 A. I think -- I think I'm following you.

14 Q. With respect to the data generated in
15 those apps that do that, isn't the user agreeing to
16 give up their analytics data in exchange for using
17 the app? 06:24:56

18 As an economic matter, isn't that the
19 transaction that's occurring?

20 A. To -- to that specific app? 06:25:22

21 Q. Uh-huh.

22 A. If -- if -- I think I'm following you.
23 But if it was disclosed and it said you're giving
24 up your data, and the user downloaded the app and
25 used it, then yes. They are giving their data -- 06:25:36

1 they are allowing that data to use their -- they 06:25:40
2 are allowing that app to use their data in exchange
3 for using the app.

4 I mean, I hope you're not trying to trick
5 me here. You're just telling me, like, assume 06:25:50
6 these four facts.

7 Q. Yes. I'm not trying to trick --

A. And I'm just assuming them.

9 Q. You should.

10 A. Okay. 06:25:59

11 Q. I mean, I could show a privacy policy
12 from a random app if you want, but I think you can
13 just assume it, and it's easier that way.

14 MR. LEE: Is WAA on or off in this
15 scenario?

16 MR. SANTACANA: I didn't specify for that
17 user. That's where we'll go now, next.

18 MR. LEE: Right. Okay. Well, then, no
19 objection so far.

20 Q. (By Mr. Santacana) So now imagine the 06:26:17
21 same user we were just talking about has a Google
22 account, and their swAA is set to off.

23 A. Okay.

24 Q. And they install this app on their
25 Android phone. The app says we use 06:26:32

1 Google Analytics and we use this other third-party 06:26:36
2 as well for analytics. Okay?
3 With me so far?
4 A. I think so.
5 Q. So this SWAA-off user, according to the 06:26:44
6 plaintiffs, has indicated that they do not want
7 that analytics data to be used by Google, but
8 there's no such restriction on the use of the
9 third-party analytics service by the app. Right?
10 That's not a claim the plaintiffs are making; fair 06:27:04
11 to say?
12 A. I think I'm following you.
13 Q. Isn't the user's decision in that moment
14 to use the app a fair indication of how much the
15 user values the data in question, given that they 06:27:24
16 would be providing the same data, or the app would,
17 to the two different analytics providers?
18 MR. LEE: Objection to form.
19 THE DEPONENT: No.
20 Q. (By Mr. Santacana) Why not? 06:27:36
21 A. Well, one person may -- one person may,
22 in this hypothetical, choose to allow the app to
23 use their private information, knowing certain
24 things about the app, knowing certain things about
25 how the app would use that data. 06:27:57

1 But then they could still have a deal 06:27:59

2 where they don't want someone else to use that

3 information. And if they have a deal, in this

4 case, with Google, for example, they may say no,

5 that information is not something that I'm willing 06:28:11

6 to share with Google.

7 And there would be a price -- before I
8 would share that information with Google, there
9 would be a price that someone would charge for that
10 information. 06:28:24

11 Q. So it's possible for the same SWAA-off
12 user to, in this hypothetical, demand a price from
13 Google for their analytics data but no price from
14 the app or the third-party analytics provider that
15 the app also uses. Fair? 06:28:41

16 A. No, that's not -- that's not fair.
17 They -- they are -- they are getting value.

Q. By using the app?

19 A. Correct.

20 Q. Okay. So when this user chooses to use 06:28:51
21 the app, there is a bargain with the app where they
22 agree to the app's usage of analytics providers in
23 exchange for using the app and no money, right?

24 A. This is the hypothetical that you're
25 posing to me. So you're -- you're saying "right," 06:29:21

1 but you telling me to assume that. So yes. 06:29:24

2 Q. Well, but -- right.

3 So my curiosity is about your answer
4 where you said that it's not possible that the same
5 SWAA-off user in this hypothetical will demand a 06:29:37
6 price from Google but not from the app or from the
7 third-party analytics provider.

8 And you said the reason it's different is
9 because they are getting value out of the app.

10 So now I'm just trying to put the value 06:29:48
11 of the app into the hypothetical.

12 Does that make sense?

13 A. I think so.

14 Q. So what is the difference, as an economic
15 matter, between the user providing their data to 06:30:05
16 Google and the user providing their data to a
17 third-party analytics provider that is not Google?

18 A. So, again, that third -- that
19 third-party, depending on -- depending on the
20 disclosure, may believe that they're getting a 06:30:35
21 value for the app.

22 Like, for example, I know if I sign up to
23 some of these policies, sometimes they won't charge
24 me for the app. It would be like --

25 Q. Right. 06:30:53

1 A. -- or it's ten bucks if I want to 06:30:53
2 download the app. Well, I didn't get any money,
3 but I saved \$10.

4 So to me, when you saved \$10, you'd say, 06:31:05
5 wait, okay, I got value for my data.

6 Q. Yes.

7 A. And so I don't -- economically, it's
8 similar.

9 And in this case, when you brought Google
10 into -- into the equation, they signed up for a 06:31:21
11 privacy policy with Google knowing that they signed
12 that policy, in this case, SWAA off. And my
13 understanding is the expectation of that is they
14 would not collect, save, or use that data then.

15 Q. So what I'm focused on is the language in 06:31:47
16 your paragraph 130 where you say that you're trying
17 to identify the payment necessary to incentivize
18 the individual "to knowingly surrender the choice
19 to keep activity on mobile apps private and allow
20 an organization to track app activity data." 06:32:06

21 Was your task here generic as to who
22 receives the data, or was it specific as to Google?
23 And is there a difference?

24 A. Here, I think it is specific as to
25 Google. And certainly, there could be -- 06:32:30

1 certainly, there could be a difference in what 06:32:38
2 someone is willing to accept for providing the
3 information.

4 Q. Depending on who they are providing it
5 to? 06:32:48

6 A. That -- yes.

7 Q. So the same user may demand \$3 per device
8 from Google, but nothing from AppsFlyer, for
9 example? That's possible --

10 A. Well -- 06:33:02

11 Q. -- as an economic matter?

12 A. I don't know that that's possible. I
13 mean, at -- at the end of the day -- at the end of
14 the day, when people share their data, oftentimes
15 they are assuming that they're going to get value
16 for that. 06:33:15

17 So -- so you say you're getting nothing,
18 but if you provide -- if you go through that policy
19 that you're talking about -- if you go through that
20 policy that you're talking about with a third-party
21 app that uses that service, they got value for
22 that. 06:33:30

23 I -- in your hypothetical, I think what
24 you're saying is, well, if that -- that analytics
25 company called them up and said, "Hey, give me your 06:33:45

1 data," I can't imagine that there would be anyone 06:33:48

2 that would just say, "Here, here's some free data."

3 Q. I see. Fair enough. It's not quite what
4 I was imaging, but that's helpful.

5 I guess where I'm confused is that you 06:34:00
6 are attempting to measure the difference between
7 that class member's economic position in real life
8 and in a world where the plaintiffs' view of SWAA
9 had been honored, right?

10 What is the difference in their economic 06:34:56
11 position; that's how you're determining actual
12 damages?

13 A. I think you're saying -- yeah, where it
14 was taken for free, for nothing.

15 Q. Right. Or against -- allegedly against 06:35:13
16 their will according to their SWAA setting?

17 A. That is correct. That's -- that's what
18 my understanding is.

19 Q. But the exact same data could have been
20 taken by a third-party analytics company with whom 06:35:24
21 the user has no relationship, and the user accepted
22 that in exchange for using the app?

23 A. Under your scenario --

24 Q. Yes.

25 A. -- yes. 06:35:39

1 Q. Do you see any contradiction there? 06:35:40

2 A. No.

3 Q. Why not?

4 A. Because, again, for -- for a number of
5 reasons. 06:35:47

6 First, a user can enter into a
7 transaction with one entity and another entity for
8 that exact same data and charge different amounts.
9 That's the user's prerogative. That happens all
10 the time in transactions. 06:36:06

11 You -- you seem to be keep indicating
12 that they gave it away for free, but they did
13 not --

14 Q. Well, for the app.

15 A. Yeah. But the app is not free. 06:36:16

16 Q. Go ahead.

17 A. The app might be free, but they got value
18 for that. And so it's not -- it's -- it's a
19 transaction. It's -- it's a bargain. It's a
20 transaction. And there's a monetary value for
21 being able to use an app. 06:36:35

22 Q. How do you measure that value?

23 Or do you, in this case, measure that
24 value?

25 A. Now, what value are you talking about 06:36:51

1 there? 06:36:53

2 Q. The monetary value for being able to use
3 an app.

4 A. I have not measured it in this -- in this
5 case. I mean, I know one way that way people 06:37:02
6 measure those such things is some apps -- some apps
7 have free versions. Some apps will give you
8 additional features, and they'll make -- charge you
9 more. Some apps just charge right out of gate.

10 So how do you measure the value -- how do 06:37:17
11 you measure the value of the app? You can look to
12 market transactions, just like what I did here is
13 look to a market-based transaction.

14 Q. Well, the market-based transaction you
15 looked at here is very different in kind than the 06:37:33
16 market-based transaction that's happening every day
17 when users download apps, agree to privacy policies
18 that disclose analytics services, and use the app
19 and get that value.

20 And I guess what I'm trying to get at is, 06:37:48
21 why didn't you consider that in your analysis of
22 market transactions?

23 Every day, there are probably of hundreds
24 of millions of agreements entered into between end
25 users and app developers where the user agrees to 06:38:11

1 give up data to analytics in exchange for using the 06:38:15
2 app.

3 Why didn't you take those market
4 transactions into account when looking for a
5 comparable? 06:38:24

6 A. For two -- for two reasons.

7 One is, I have a very good comparable
8 here with -- with Ipsos Screenwise, as well as the
9 other ones that I talked about here. You're --
10 you're talking about going out and analyzing 06:38:46
11 hundreds of millions of transactions, which would
12 cost a significant amount of money and I'm not sure
13 that would end up with any better information than
14 what I had here.

15 And in those cases, you would have to 06:39:02
16 make assumptions about how each individual valued
17 the app that they downloaded and gave up their data
18 for. That is -- in my opinion, as I sit here
19 today, that would probably be a less valuable
20 exercise than relying upon what I did -- than what 06:39:25
21 I did here.

22 I would say it would rely -- would result
23 in less reliable data than what I did here.

24 Q. In the negotiation that you posit in your
25 actual damages opinion, you theorize that Google 06:39:52

1 and the user would reach the amount of \$3. The 06:39:59

2 user gives up certain data and, in exchange,

3 Google Pays \$3, and you believe that's the fair

4 price for the certain data, right?

5 A. Per device. 06:40:12

6 Q. Per device. That's right.

7 Did you take into account in analyzing

8 this hypothetical transaction between Google and a

9 user the restrictions that there would be on

10 Google's use of the data the user is giving up or 06:40:33

11 the degree to which it is restricted, if at all?

12 MR. LEE: Objection. Form.

13 Q. (By Mr. Santacana) I'll come back to it.

14 Let me ask you this: You understand

15 Google doesn't personalize ads with sWAA-off data, 06:41:03

16 right?

17 A. That is my understanding, yes.

18 Q. What it does do, according to the

19 plaintiffs and Mr. Hochman, is recordkeeping

20 surrounding advertising. It takes account of the 06:41:17

21 ads that it shows, the ads that get clicked on, and

22 conversions that are made, even if the user has

23 sWAA off.

24 That's the claim in the case, right?

25 A. Well, that's certainly part of the claim. 06:41:35

1 That's correct.

06:41:37

2 Q. But it's not the case that Google does
3 personalizing of advertising or targeting with that
4 same information, right?

5 That's your understanding?

06:41:44

6 A. That -- for sWAA-off --

7 Q. Right.

8 A. -- users. That is -- that is correct.

9 Q. For sWAA-on users, it can personalize
10 advertising, right?

06:41:57

11 A. For sWAA-on -- I believe that it can,
12 yes. I'm not 100 percent sure. I guess it would
13 depend on the -- on the particular user. If the
14 user had GAP off, then no, I guess it couldn't.

15 Q. Does your hypothetical \$3 fair price take
16 into account that distinction, that Google, even
17 though it's getting the data from that user, can
18 only use it for this accounting purpose. It cannot
19 use it to personalize ads?

06:42:14

20 Is that a restriction on the use of the
21 data that you've taken into account in arriving at
22 your \$3?

06:42:30

23 A. Yes.

24 Q. So if Google could use it for
25 personalization, presumably the \$3 figure would be

06:42:38

1 higher? 06:42:43

2 A. It certainly could be higher. That is
3 correct.

4 Q. Okay. And if Google couldn't use it for
5 anything, it was just, "Here's my data," and then 06:42:53
6 Google just lights it on fire and throws it in the
7 ocean, then presumably the price would be lower
8 than \$3?

9 I'm just trying to understand the
10 dynamics of this transaction. 06:43:07

11 A. I guess I'm really not understanding,
12 like -- like, if you give someone your data, and
13 they light it on fire and send it into the ocean --
14 and send it into the ocean.

15 Q. Then you'd probably agree to that for
16 less money? 06:43:20

17 A. I -- that is possible. I am not
18 100 percent sure. That seems like a weird
19 hypothetical that I can't really fathom anyone
20 would enter into, but -- 06:43:36

21 Q. No pun intended.

22 A. -- possible.

23 Q. I guess what I'm trying to get at is, it
24 seems to me, at least, that in this transaction you
25 hypothesize, one of factors that would drive the 06:43:51

1 price up or down is what Google's going to do with 06:43:54
2 the data, right?

3 MR. LEE: Objection to form.

4 Mischaracterizes.

5 THE DEPONENT: I -- I mean, I don't -- I 06:44:07
6 don't necessarily think that would drive it up or
7 down, what Google is going to do to the data.

8 I think that what I'm talking about here
9 is you need to incent someone to part --
10 incentivize someone to part with their data. And 06:44:25
11 to part with that data is what I'm talking about
12 here.

13 Q. (By Mr. Santacana) Well, okay. But a
14 moment ago, you said if Google is going to use it
15 for personalization, that would drive the price up? 06:44:35

16 A. It could. You're asking about a
17 hypothetical. It could -- it could drive it up.
18 I -- I'm trying to answer your questions.

19 I did a specific analysis based on what
20 actually happened. That didn't actually happen. 06:44:47
21 But...

22 Q. Well --

23 A. You're asking me about hypotheticals, and
24 I'm trying to answer them as best I can.

25 Q. Your opinion attempts to characterize 06:44:55

1 what a user who does not exist would be willing to 06:45:01
2 accept in dollars in exchange for data that in real
3 life was collected and used by Google, right?

4 That's your task here?

5 A. Well, I think that the users do -- I 06:45:16
6 mean, there's -- there's a large class of users
7 that do exist.

8 Q. I'm sorry.

9 A user who exists but who didn't actually 06:45:24
10 have a chance to have this negotiation with Google,
11 right?

12 A. That is correct.

13 Q. And you're trying to figure out what
14 would it take to get them to part with the data?

15 A. That -- that's what I'm calculating here 06:45:35
16 is what it would take for them to part with the
17 data.

18 Q. So if Google says, I'll pay you \$3, and
19 then I'm going to publish the data on Reddit, okay,
20 isn't that a different deal than I'll give you \$3, 06:45:49
21 but I'm only going to use it for advertising and
22 bookkeeping purposes?

23 MR. LEE: Objection. Incomplete
24 hypothetical.

25 Q. (By Mr. Santacana) It matters what 06:46:08

1 Google is going to use it for? 06:46:09

2 A. To some -- to some extent, yes, that

3 makes sense.

4 Q. Okay. So did you describe in your report

5 or come to any reasoning about what impact Google's 06:46:16

6 use of the data would have on the price, this \$3

7 price?

8 MR. LEE: Asked and answered.

9 THE DEPONENT: I mean, again, I know how

10 they're -- I know how they're using the data. I 06:46:33

11 have, obviously, the information that was provided

12 to me.

13 So yes, I -- I looked at that. I looked

14 at that, and I compared it to the Ipsos study.

15 Q. (By Mr. Santacana) Right. 06:46:47

16 A. And then I determined that a \$3 price was

17 appropriate per device --

18 Q. The Ipsos study --

19 A. -- in this case.

20 Q. I'm sorry. Go ahead. 06:46:53

21 A. For this case.

22 Q. The Ipsos study terms allow Google to use

23 the participants' data for personalized

24 advertising, right?

25 A. That is correct. 06:47:08

1 Q. And those terms allow Google to join the 06:47:08
2 data with other data Google has about that person,
3 right?
4 A. That is correct. Yes.
5 Q. Okay. The terms of the transaction that 06:47:16
6 you're hypothesizing in paragraph 130, 131 and 132
7 would not permit that, right?
8 A. Well, that -- that is my assumption, yes.
9 No, it would not. They do not -- they do not get
10 personalized ads right now, so I would not expect 06:47:49
11 that they would expect that they would all of a
12 sudden start receiving personalized ads. That's
13 correct.
14 Q. So did you adjust the Ipsos price
15 downward to reflect that greater restriction on the 06:47:59
16 use of the data?
17 A. No, one wouldn't -- I would not need to
18 do that, no.
19 Q. Why not?
20 A. Because here, again, in the Ipsos -- we 06:48:05
21 talked about this earlier.
22 In Ipsos study, we are talking about
23 willing participants versus unwilling participants.
24 So the WAA-off/sWAA-off users are
25 unwilling participants in this. 06:48:21

1 They are collecting, meaning Google is 06:48:25
2 collecting, data that participants believe --
3 participants believe that is -- that participants
4 have gone through the steps that indicate that that
5 data is important to them, and they do not want it 06:48:52
6 shared. That's not the case in the Ipsos study.

7 So making an additional adjustment to
8 what I've made, where here, we're talking about the
9 device, specifically the device, and Ipsos pays \$3
10 for the device but then pays -- but then pays 06:49:12
11 additional dollars on top of that for some of the
12 information that you were talking about earlier, I
13 don't believe that I need to make any adjustments,
14 because here we're talking about device to device.

15 Q. I don't understand your answer. 06:49:41

16 The transaction in Ipsos gives Google a
17 wider latitude for what it can do with the data
18 than the transaction you're hypothesizing.

19 Did that play any role in the amount of
20 money that you ultimately concluded this 06:49:55
21 hypothetical transaction would arrive at as a fair
22 price?

23 A. I don't know how to answer that other
24 than what I've answered before. In this -- in the
25 Ipsos study, Google pays market participants in a 06:50:12

1 number of different ways, not just on a -- not just 06:50:19
2 on a per device.

3 They pay money for their Web browser.

4 They pay money for devices. They pay money for 06:50:31
5 using a router. They pay money for all these other
6 things.

7 But once you get down to the device
8 level, you're -- what -- in my opinion collecting
9 similar information. And that similar -- and that
10 similar information, the best market data point is 06:50:45
11 the \$3 -- the \$3. They've already been compensated
12 for those -- that other use of the data.

13 Q. Okay. I need you to listen carefully to
14 this question, because I understand your answer,
15 but then my question's different. 06:51:05

16 Did the difference in the terms of the
17 transaction regarding what Google could do with the
18 data, did it play a role in the amount of money you
19 ultimately concluded the hypothetical transaction
20 in this case would arrive at? 06:51:23

21 Did it play a role? I just want to know.

22 A. Well, I think I just answered that with
23 what I just said, but --

24 Q. Well, what you said summarized your whole
25 opinion. 06:51:34

1 A. -- yes. 06:51:34

2 Q. I want to know if this was one of the
3 factors that you considered, and, if so, what role
4 it played.

5 A. I -- I just said. But yes, it -- it is 06:51:42
6 one of the things that I considered in my -- in my
7 analysis.

8 Q. And what role did it play? Did it drive
9 the price up or did it drive it down?

10 MR. LEE: Objection to form. 06:51:57

11 THE DEPONENT: Well, as we know, in -- in
12 this case, they -- I am assuming that these users
13 will get paid less than what they get paid in the
14 Ipsos study.

15 So there are -- there certainly is a 06:52:09
16 lower amount of compensation that I put to a user
17 relative to what they would get in the Ipsos study.
18 And so that -- yes, that is one of things that I
19 considered when I was selecting the \$3 in this
20 case. 06:52:27

21 Q. (By Mr. Santacana) How much lower did it
22 drive the price?

23 A. I did not quantify specifically how much
24 lower that particular aspect drove the price.

25 Q. Did you quantify in your report or in 06:52:44

1 some other way how much any factor in particular 06:52:47
2 affected the price?

3 A. Yes.

4 Q. Where?

5 A. I mean, it's in -- it's what I talk about 06:53:00
6 in my "Actual Damages" --

7 Q. Show me.

8 A. -- section.

9 So, again, ultimately what I'm -- what
10 I'm selecting here is mobile phone price, \$3, and 06:53:23
11 tablet price of \$3. I'm not including the router.
12 I'm not including the browser. I'm not including
13 the \$2 bonus. I'm not including the hundred
14 dollars for installing a router.

15 Any of those -- any of those additional 06:53:43
16 compensations -- compensation that is paid to a
17 user, I'm not including that.

18 Q. My question was a little different.

19 Let me -- let me try and ask it a
20 different way. 06:53:58

21 In any negotiation, there are factors
22 that will drive the price up and factors that will
23 drive it down, right?

24 A. That -- yes.

25 Q. Fair to say? 06:54:12

1 A. That is correct. 06:54:12

2 Q. Okay. So as you are trying to determine
3 how to incentivize a class member to part with the
4 data, there will be factors that come into that,
5 right? 06:54:21

6 A. I -- I think -- I think you're talking
7 about any transaction, whether or not it's this
8 transaction or any other transaction.

9 Q. Did you quantify any specific factor as
10 to its impact on the ultimate price for this 06:54:36
11 transaction, or was it more of a totality of the
12 circumstances-type conclusion about the \$3?

13 MR. LEE: Asked and answered.

14 Q. (By Mr. Santacana) I mean, I don't think
15 you did. I don't think there's a table that says 06:54:55
16 this factor, minus \$1; this factor, minus 12 cents.
17 That's not in here.

18 I'm just asking you if it's somewhere
19 else or if I misread it.

20 THE DEPONENT: No, if you're asking if 06:55:04
21 there's a table like that that's in my report, it's
22 not in my report, as you know.

23 And I don't have any similar table
24 somewhere else.

25 Q. (By Mr. Santacana) How did you calculate 06:55:13

1 the \$3 payment per device? 06:55:14

2 A. Again, as we -- we talked about, I looked
3 at this -- this analysis, the Ipsos study, as well
4 as the other studies that I talk about in my actual
5 damages. I determined, based on the comparability 06:55:36
6 of specifically the Ipsos study as it relates to
7 mobile phones and tablets, so devices, of \$3 as --
8 I believe that that's an appropriate one-time
9 payment per device based on the information that
10 was available to me here. 06:55:58

11 Q. Why isn't the \$3-per-device price that
12 you arrived at higher than what the Ipsos study
13 pays participants?

14 You say the Ipsos study is willing
15 participants. This is unwilling -- 06:56:31

16 A. Yes.

17 Q. -- participants.

18 So shouldn't these unwilling participants
19 get paid more?

20 MR. LEE: Asked and answered. 06:56:38

21 THE DEPONENT: I think I answered that
22 before. But I do believe that this is a
23 conservative value for those -- for the Ipsos
24 studies.

25 Q. (By Mr. Santacana) What does 06:56:45

1 "conservative" mean in that sentence? 06:56:45

2 A. It means that it could be -- it could, in

3 fact, be higher. But I think that this is an

4 appropriate price to incentivize based on what I

5 said -- based on what I said before, to incentivize 06:56:55

6 those users to part with their data.

7 Q. Would \$4 be an appropriate price?

8 MR. LEE: Objection to form.

9 THE DEPONENT: I -- I did not do an

10 analysis of \$4, so I don't know the answer to that. 06:57:06

11 Q. (By Mr. Santacana) What do you mean you

12 did not do -- you did an analysis and came up with

13 a number. So presumably, you considered all

14 numbers that exist, and you arrived at one of them

15 and said, "This is the answer." 06:57:16

16 So I'm just saying, why did you rule out

17 \$4?

18 A. Ultimately, I've got a market transaction

19 here that shows \$3.

20 Q. Per month, which you deviated from? 06:57:25

21 A. Correct.

22 Q. So why didn't you say \$4?

23 A. Because --

24 MR. LEE: Asked and answered.

25 Go ahead. 06:57:37

1 THE DEPONENT: Because based on the 06:57:37
2 totality of the information available to me, as we
3 talked about earlier in the deposition, I think
4 that -- I think that \$3 is an appropriate amount.
5 A one-time payment of \$3 is an appropriate amount. 06:57:48
6 Q. (By Mr. Santacana) So you would agree
7 with me that \$4 is too much?
8 MR. LEE: Mischaracterizes testimony.
9 THE DEPONENT: Again, I think \$3 is
10 conservative. Could be it higher than \$3? Yes. 06:58:03
11 It could be --
12 Q. (By Mr. Santacana) Could be it lower?
13 MR. LEE: Hold on. Let him finish.
14 THE DEPONENT: Could it be higher than
15 \$3? Yes. No, I do think it could be lower than 06:58:09
16 \$3.
17 Q. (By Mr. Santacana) So \$3 is the lowest
18 number that you could come up with?
19 A. \$3 per device. I don't think that I
20 would come up with a number lower than that. I 06:58:19
21 did -- I would not come up with a number lower than
22 that.
23 Q. Are there members of the class who you
24 would expect would demand more than \$3 if they had
25 the opportunity to engage in this negotiation? 06:58:34

1 MR. LEE: Calls for speculation. 06:58:42

2 THE DEPONENT: I don't -- I don't know
3 the answer to that. I didn't analyze that.

4 Certainly, I think \$3 is an appropriate price to
5 incentivize the class members to part with their 06:58:58
6 data, as I said.

7 Q. (By Mr. Santacana) Does that mean that
8 there is no member of the class, in your opinion,
9 who would require more than \$3 to be incentivized
10 to part with their data? 06:59:16

11 MR. LEE: Calls for speculation.

12 THE DEPONENT: I don't -- I don't -- I
13 mean, again, I didn't do an analysis of that, so I
14 don't -- I don't know the answer to that.

15 Q. (By Mr. Santacana) Well, you said \$3 is 06:59:24
16 an appropriate price to incentivize the class
17 members.

18 A. That is correct.

19 Q. Doesn't that imply that there can't be a
20 class member who would need \$3.01? Otherwise, your 06:59:32
21 number would be wrong, right?

22 A. I think -- I think if you're -- if you're
23 talking about the precision of \$3 versus \$3.01 --

24 Q. Okay. \$3 versus \$3 trillion. How do you
25 know there isn't a class member who requires 06:59:48

1 | \$3 trillion? 06:59:51

2 MR. LEE: Objection --

3 Q. (By Mr. Santacana) You understand my
4 question, right?

5 MR. LEE: Objection -- hold on. 06:59:54

6 Objection. Mischaracterizes the model.

7 THE DEPONENT: I don't -- I'm not aware
8 of Google offering anyone \$3 trillion for their
9 data.

10 Q. (By Mr. Santacana) But part -- 07:00:08

11 A. But --

12 MR. LEE: Hold on.

13 Q. (By Mr. Santacana) Go ahead.

14 A. But if they did, I -- I would assume that
15 someone would likely take that.

Q. So in paragraph 132, you say that the

17 factors that matter are Google's payments,
18 historical payments, for user data; users'
19 willingness to pay to prevent data collection; a
20 research organizations' willingness to pay for data
21 collection.

22 Did you take into account at all what
23 users accept in exchange for data collection? Or
24 is that just implied in the payments Google makes

A. What users accept, I know what users -- I 07:00:53

1 know at least some set of users -- 07:00:55

2 Q. Okay.

3 A. -- are willing to accept, because I know
4 what's going on in the Ipsos study.

5 Q. Okay. And in your mind, is the Ipsos 07:01:01
6 study representative of all similarly situated
7 users?

8 A. I don't know if it's all similarly
9 situated users, but I do think it's -- it's a good
10 comparable to use in this case. 07:01:22

11 Q. So then I return to my question, which
12 is, how do you know that there aren't some
13 significant chunk of the class -- let's say,
14 privacy fundamentalists -- who would refuse to part
15 with their data at \$3, just flat-out refuse, 07:01:44
16 absolutely not. Not \$4. Not \$5. Maybe \$100.

17 How do you know there aren't people like
18 that in the class?

19 A. Well, if you're asking me if I did a
20 study of the class, I did not do a study of the 07:01:57
21 class. So I think --

22 Q. I'm asking --

23 A. So I think -- I think, when you look at
24 the class as a whole, and you think about what
25 would be appropriate to incentivize class members 07:02:09

1 to part with their data, the data points that are 07:02:15
2 most important or that are most reliable, based on
3 the information available, are the Ipsos study data
4 points.

5 Q. Do you know what a privacy fundamentalist 07:02:27
6 is?

7 A. Yes.

8 Q. Do you think they would take \$3?

9 MR. LEE: Calls for speculation.

10 THE DEPONENT: I don't know what they 07:02:35
11 would take. I -- I have not surveyed them, as I
12 stated earlier in my case.

13 Q. (By Mr. Santacana) Do you doubt --

14 A. In -- in my testimony, I should say.

15 Q. Do you doubt that there are privacy 07:02:47
16 fundamentalist in this class?

17 A. No, I do not.

18 Q. Is it your opinion that a privacy
19 fundamentalist in this class would accept \$3 in
20 exchange for the at-issue data? 07:02:59

21 MR. LEE: Calls for speculation.

22 THE DEPONENT: I -- I mean, I just can't
23 speculate on that. I don't know the answer to
24 that. I did not do a survey.

25 Q. (By Mr. Santacana) So your opinion on \$3 07:03:09

1 is meant to capture sort of a population average, 07:03:11

2 conservative floor fair price; is that a fair
3 characterization?

4 A. I think it's a conservative floor,
5 appropriate price for the class -- for the class. 07:03:29

6 Yes, I agree with that.

7 Q. But there may be people in the class who,
8 if they could do it themselves, they'd negotiate a
9 different price, maybe even a very different price?

10 MR. LEE: Calls for speculation. 07:03:45

11 THE DEPONENT: I don't know the answer to
12 that.

13 MR. LEE: Can we get a time check,
14 please?

15 THE VIDEOGRAPHER: Time is running, so I 07:03:52
16 can give an approximation, which is 6 hours and
17 28-ish minutes.

18 MR. LEE: Okay. Thanks.

19 Q. (By Mr. Santacana) Would you accept \$3
20 for the at-issue data? 07:04:01

21 A. No, because I can't be part of the class.
22 So --

23 Q. I said would you, not will you.

24 MR. LEE: Objection to form.

25 THE DEPONENT: I'm not -- I'm not going 07:04:13

1 to answer what I would personally do or not do. 07:04:14

2 Q. (By Mr. Santacana) Why?

3 A. Because that's not none of your business.

4 That's not part of my report.

5 Q. Well, you're here under subpoena, and 07:04:22
6 it's a perfectly relevant question.

7 Would you accept \$3 in exchange for the
8 SWAA-off data at issue in the case?

9 MR. LEE: Beyond the scope.

10 THE DEPONENT: I'm not -- I'm not going 07:04:34
11 to answer that question. It's not part of my
12 report.

13 Q. (By Mr. Santacana) It doesn't matter if
14 it's part of your report or not. It's a relevant
15 question that goes to your credibility. 07:04:41

16 If you're opining in your report that \$3
17 is a fair price, but you yourself wouldn't accept
18 it, that is relevant.

19 So I'm going to ask it again: Would you
20 personally accept \$3 in exchange for the at-issue 07:04:51
21 data to Google?

22 MR. LEE: Beyond the scope.

23 Q. (By Mr. Santacana) Go ahead.

24 MR. LEE: I just said beyond the scope.

25 THE DEPONENT: I do not think that it's 07:05:01

1 relevant. 07:05:02

2 Q. (By Mr. Santacana) It's not for you to
3 decide.

4 MR. LEE: It's not for you decide either.

5 THE DEPONENT: It's certainly not for you 07:05:06
6 to decide. I do not think it's relevant. It's
7 beyond of the scope of my report.

8 Q. (By Mr. Santacana) Do you have sWAA on
9 or off?

10 A. Again, that's also -- that's also not 07:05:15
11 part of my report, and that is not relevant.

12 Q. Do you have a Google account?

13 A. None of that is -- that is not relevant
14 here.

15 MR. LEE: This is all beyond the scope. 07:05:25

16 Q. (By Mr. Santacana) Are you refusing to
17 answer?

18 A. I'm refusing to answer questions that I
19 think are beyond the scope of my report.

20 Q. Okay. You understand you're under 07:05:33
21 subpoena, right?

22 MR. LEE: Are you trying to intimidate
23 the witness? I mean, he's already told you his
24 position. You've already told him he's under
25 subpoena. He's aware of that. He's -- he's been 07:05:45

1 deposed before. He's told you his position. 07:05:47

2 Ask another question.

3 Q. (By Mr. Santacana) Do you understand
4 you're under subpoena?

5 A. I understand that there's a subpoena in 07:05:55
6 this case, yes.

7 Q. Did you review it?

8 A. Yes, I did.

9 Q. Was it limited in scope for subject
10 matter? 07:06:01

11 A. I -- you would have to show me the
12 subpoena again. I don't -- I don't recall.

13 Q. Okay.

14 MR. SANTACANA: I pass the witness.

15 MR. LEE: Okay. Let's take a break. 07:06:17

16 THE VIDEOGRAPHER: Off the record. The
17 time is 7:05.

18 (Recess taken.)

19 THE VIDEOGRAPHER: This marks the
20 beginning of Media No. 8 in the deposition of 07:30:52
21 Michael Lasinski. We're back on the record. The
22 time is 7:30.

23

24

25 ///// 07:31:00

1 EXAMINATION 07:31:00

2 BY MR. LEE:

3 Q. Good afternoon, Mr. Lasinski. Again, my
4 name James Lee for Boies Schiller. And I just have
5 a few questions for you. Okay? 07:31:07

6 A. Okay.

7 Q. All right. Earlier today, you testified
8 that you understood ChromeGuard to relate to a
9 privacy setting that blocked Google and any other
10 third party from tracking conversions. 07:31:16

11 Do you remember that?

12 A. Yes.

13 Q. Here in this case, however, we're talking
14 about situations where an advertiser bids on a
15 conversion that is specifically tracked by
16 Google Analytics for Firebase. 07:31:26

17 Do you understand that?

18 A. Yes.

19 Q. And if that's the case, is it even
20 possible for another third party to track a
21 Google Analytics for Firebase conversion? 07:31:33

22 A. My understanding is it's not.

23 Q. I think you mentioned this earlier in the
24 day, but just to make sure that we have it clear,
25 does personalization of ads at all affect your 07:31:49

1 calculation of unjust enrichment relating to 07:31:53

2 conversion tracking, which is your Scenario 1?

3 A. It does not, no.

4 Q. Okay.

5 Now, earlier today, you testified that 07:31:59

6 advertisers would spend less with Google if they

7 knew Google could not serve ads to sWAA-off users.

8 Do you remember that?

9 A. Yes.

10 Q. Is that because Google would not charge 07:32:12

11 advertisers to serve ads to sWAA-off users?

12 A. Yes.

13 Q. Now, Google's lawyer invited to imagine

14 how advertisers react if Google couldn't serve ads

15 to sWAA-off users. 07:32:26

16 Do you remember that?

17 A. Yes.

18 Q. And he asked you whether advertisers

19 would continue to spend the same amount of money

20 with Google by increasing their ad spend on sWAA-on 07:32:32

21 users.

22 Do you remember that?

23 A. I do, yes.

24 Q. Are you aware of any evidence suggesting

25 that advertisers would increase how much they would 07:32:41

1 spend for sWAA-on ads in a but-for world? 07:32:44
2 A. No, I am not.
3 Q. Is it fair to say that sWAA-on users
4 don't necessarily get more ads just because Google
5 wants to serve them more ads? 07:32:54
6 MR. SANTACANA: Objection. Vague.
7 THE DEPONENT: That is my understanding,
8 yes.
9 Q. (By Mr. Lee) And is that because sWAA-on
10 users would only see more ads if they visit more 07:33:01
11 apps or spend more time in apps?
12 A. Yes, that is correct.
13 MR. SANTACANA: Incomplete hypothetical.
14 Q. (By Mr. Lee) Did Google conduct any
15 study suggesting advertisers would spend more for 07:33:10
16 sWAA-on ads in a but-for world?
17 A. Not that was produced in this case --
18 Q. Are you aware --
19 A. -- no.
20 Q. -- any of Google's rebuttal experts 07:33:21
21 preparing such a study?
22 A. No, I'm not.
23 Q. As far as you -- as far as you're aware,
24 does any such analysis exist?
25 A. It -- it does not. 07:33:30

1 Q. Do you remember when, earlier today, 07:33:32
2 Google's lawyer asked you whether you were trying
3 to measure the damage in your unjust enrichment
4 opinion -- you're trying to measure the profits
5 that Google gained thanks to its alleged misleading 07:33:43
6 of those plaintiffs?

7 A. Yes.

8 Q. And do you remember answering that's
9 generally somewhat accurate?

10 A. Yes, I do.

11 Q. So I want to understand what part isn't
12 accurate so that we're all clear. So let me ask
13 you the following: Do your unjust enrichment
14 models measure how much money Google made from
15 making misrepresentations to Plaintiffs, or from 07:34:04
16 collecting WAA- or SWAA-off data without their
17 permission?

18 A. The latter.

19 Q. Is it fair to say the but-for world that
20 your unjust enrichment models contemplate is the 07:34:16
21 impact on Google's profits if it had not collected
22 the WAA- or SWAA-off data that it's collected
23 without permission?

24 A. Yes, it is.

25 Q. Okay. You were asked by Google's lawyer 07:34:26

1 whether you considered what would have happened in 07:34:29
2 a but-for world if a court did not allow GA for
3 Firebase for SWAA-off users at the beginning of the
4 class period.

5 Do you remember that? 07:34:40

6 A. Yes.

7 Q. And you said, "not beyond the scenarios,
8 in your opinion."

9 Do you remember testifying to that?

10 A. I did, yes. 07:34:45

11 Q. All right. I want to talk about
12 Scenario 1.

13 Is the measure of damages in Scenario 1
14 the difference between Google using SWAA-off data
15 for conversion tracking and Google not being able
16 to use that data? 07:34:55

17 A. Yes, it is.

18 Q. Is the latter the but-for world you
19 considered?

20 MR. SANTACANA: Vague. 07:35:05

21 THE DEPONENT: Yes, it is.

22 Q. (By Mr. Lee) Okay. Now, counsel for
23 Google asked what advertisers would have done if
24 Google could not perform a conversion tracking for
25 SWAA-off users. 07:35:22

1 A. Yes, it did. It was \$20. 07:36:14

2 Q. And did you exclude that \$20 up-front fee
3 in your damages calculation?

4 A. I did, yes.

5 MR. LEE: Thank you, Mr. Lasinski. I 07:36:21
6 have no more further questions for now.

7 FURTHER EXAMINATION

8 BY MR. SANTACANA:

9 Q. Mr. Lasinski, you just testified that
10 personalization of ads played no role in your 07:36:30
11 Scenario 1 opinion?

12 A. That is correct, yes.

13 Q. Did personalization of ads play any role
14 in any of your damages calculations?

15 A. No, it did not. 07:36:44

16 Q. Okay. Just making sure.

17 You were just asked the following
18 question: "Do your unjust enrichment models
19 measure money Google earned from misrepresentations
20 or money Google earned from collecting data without 07:37:02
21 users' permission?" [as read]

22 Do you recall that question?

23 A. I do recall that.

24 Q. And you said they measure the latter?

25 A. Correct. 07:37:12

1 Q. Which is to say, money Google earned from 07:37:13
2 collecting data without users' permission, right?
3 A. Correct.
4 Q. How do you know it was without users' 07:37:23
5 permission?
6 A. Because my starting point for the class
7 is WAA-off/sWAA-off users. So they did not have
8 permission.
9 Q. How do you know that the data Google
10 collected falls within the scope of what the sWAA 07:37:41
11 button says it applies to?
12 A. Because I was informed technically what
13 my scenarios should look like from Mr. Hochman.
14 And so he provided me with the information on how
15 to make my -- make those assumptions. 07:38:08
16 Q. Okay. So just to clear this up, you told
17 me at the start of day that you wouldn't opine on
18 what Google should or shouldn't do.
19 Do you remember that?
20 That's not your role here. 07:38:23
21 A. I don't -- I didn't -- I don't remember
22 my testimony. But what Google or shouldn't do, I
23 don't believe that that's necessarily my role.
24 Q. Nor is it whether Google is liable for
25 anything in particular, right? 07:38:37

1 A. Yeah, I'm not the liability expert, if 07:38:41
2 that's what you're asking.

3 Q. On that subject, you were just asked
4 something about if Google were to hire
5 third parties to track conversions, would that be 07:38:48
6 appropriate in light of the sWAA and WAA
7 descriptions?

8 MR. LEE: Disclosures.

9 Q. (By Mr. Santacana) Disclosures.

10 A. Do you recall that question? 07:39:00

11 A. Yes, I do.

12 Q. You answered that question, right?

13 A. I do, yes. I did.

14 Q. Are you now opining on what would or
15 would not be appropriate for Google to do given the 07:39:12
16 way that the sWAA and WAA disclosure are written?

17 MR. LEE: Objection. Form.

18 Mischaracterizes.

19 THE DEPONENT: My -- what I'm -- what I'm
20 testifying here is, I understand that they couldn't 07:39:27
21 collect that information. So just hiring a
22 third party to collect that information doesn't
23 seem appropriate.

24 Q. (By Mr. Santacana) Why?

25 A. Because I don't know that that -- getting 07:39:36

1 around the actual disclosures in that way to try to 07:39:39
2 serve -- to try to use the information seems
3 appropriate from a legal perspective -- from a
4 common-sense perspective, I should say.

5 Q. Why? 07:39:51

6 A. That's my opinion.

7 Q. But why is -- is it an expert opinion
8 you're offering in this case?

9 A. I was asked the question, so I don't
10 believe that that's -- that is necessarily 07:40:04
11 appropriate to do that.

12 Q. Okay. So you offered an answer to that
13 question that's outside the scope of your expert
14 opinions?

15 A. It's not -- that's not inside my report. 07:40:15

16 Q. That's just your personal opinion?

17 A. That's my personal opinion as an expert,
18 yes.

19 Q. I don't understand what that means.

20 Is it an expert opinion in the case or 07:40:27
21 not?

22 A. Well, I'm not a legal expert, so it's not
23 a legal expert opinion. It's -- I'm the damages
24 person, so that's what it -- it's my opinion.

25 Q. The question you were asked was: "If 07:41:04

1 Google hired third-party trackers to do the 07:41:06
2 tracking for it in that scenario, do you think that
3 would be appropriate given Google's WAA and SWAA
4 disclosures?"

5 And you answered, "I do not." 07:41:15

6 Is your answer to that question an answer
7 you're providing as an expert in this case or as a
8 person and private citizen who has a lay opinion?

9 MR. LEE: Asked and answered.

10 Go ahead. 07:41:31

11 THE DEPONENT: I mean, it's -- I'm -- I'm
12 not an expert in that area, so it's not an expert
13 opinion.

14 Q. (By Mr. Santacana) It's just your
15 personal belief? 07:41:37

16 A. It's my personal opinion based on my
17 information -- the information available to me in
18 this case.

19 Q. Okay. If Google hired third-party
20 trackers to do the tracking, and those third-party 07:41:45
21 companies could not share any data with Google
22 other than the number of conversions, would that be
23 appropriate?

24 In other words, Google never sees the
25 user data, just gets an accounting from an 07:42:02

1 accountant. 07:42:04

2 A. I think you're -- you're asking -- you're
3 asking me a question I -- I don't know the answer
4 to that, as I sit here.

5 Q. Well, what more do you need to know to 07:42:14
6 know if it's appropriate?

7 A. Well, you asked me a question whether or
8 not Google hired a third party to collect data that
9 they were told that they could not collect. That
10 doesn't seem appropriate to me. 07:42:28

11 Q. That's the question that Mr. Lee asked
12 you.

13 The question I'm asking you is, what if
14 Google hired a third party to do conversion
15 accounting for it and for its advertisers, and that 07:42:42
16 third party counts up conversions and tells the
17 advertisers how many conversions they have, and
18 Google never sees the data.

19 In your view, is that appropriate in
20 light of the WAA and SWAA disclosure? 07:42:55

21 MR. LEE: Objection. Incomplete
22 hypothetical. Impossible hypothetical.

23 Q. (By Mr. Santacana) Go ahead. Is that
24 appropriate in light of the disclosures?

25 A. I don't know how to answer that. 07:43:07

1 Q. Well, you had no trouble answering 07:43:08
2 Mr. Lee's hypothetical. Did you and --
3 A. Correct.
4 Q. -- Mr. Lee discuss that hypothetical
5 during the break? 07:43:13
6 A. No.
7 MR. LEE: Mine made sense.
8 Q. (By Mr. Santacana) Okay. Do you think
9 it's an appropriate price in exchange for SWAA-off
10 data to be paid \$3? 07:43:35
11 A. For a class member, yes.
12 Q. And for you?
13 A. If I were a class member, I would accept
14 \$3. I cannot be a class member, but if I were a
15 class member, I would. 07:43:53
16 Q. Did you talk about that question you
17 refused to answer earlier with your lawyer during
18 the break?
19 A. No, I did not.
20 Q. You just decided to answer it now? 07:44:00
21 A. Yes, that is correct.
22 Q. Why did you change your mind?
23 A. Because I -- I thought of if I could say
24 it as if I were a class member, then I would agree.
25 Then I could answer. 07:44:11

1 But I wasn't -- I wasn't thinking of 07:44:13
2 myself as a class member, because I couldn't be a
3 class member before. Or I can't be a class member
4 now. So I didn't think of that way to answer it.

5 MR. SANTACANA: Okay. I want to take 07:44:24
6 five minutes, and then we'll see where we can end
7 up.

8 THE VIDEOGRAPHER: Off the record. The
9 time is 7:43.

10 (Recess taken.) 07:47:48

11 THE VIDEOGRAPHER: We are back on the
12 record. The time is 7:48.

13 Q. (By Mr. Santacana) Okay. I just have a
14 few more questions for you.

15 So first, keeping with the last thing we 07:48:51
16 were talking about, do you have SWAA turned on our
17 off on your Google accounts?

18 A. I don't know the answer to that.

19 Q. Do you know if you checked it at any 07:49:07
20 point since you were retained for this case?

21 A. I do.

22 Q. You did check it?

23 A. I do know that -- I do know if I checked
24 it.

25 Q. Did you change the setting when you 07:49:13

1 checked it? 07:49:15

2 A. No. I didn't -- I did not check it. I

3 purposely did not check it.

4 Q. I see.

5 A. Once I was retained on this case. 07:49:21

6 Q. Because you wanted to remain independent?

7 A. Because I just thought it would be better

8 off not to mess with any data -- with anything that

9 Google might be collecting.

10 Q. Why? 07:49:35

11 A. Because I'm -- I'm an expert in this

12 case, and so I don't -- I don't want to, like,

13 change any settings or do anything.

14 Q. Does it concern you that Google may be

15 collecting data about you that you did not consent 07:49:46

16 to?

17 MR. LEE: Beyond the scope.

18 Answer if you can.

19 THE DEPONENT: Yes, but I'm not going to

20 change any behaviors because I'm -- as a member of 07:49:57

21 this expert team.

22 Q. (By Mr. Santacana) Okay. Relating to

23 your actual damages opinion, \$3 per device, do you

24 recognize that the opinion, as you've rendered it,

25 could result in class members who had lots and lots 07:50:15

1 of data transmitted to Google being paid less than 07:50:18
2 class members who had very little data transmitted
3 to Google?
4 A. Yes, I do.
5 Q. That's a possibility in your opinion? 07:50:27
6 A. Yes, it is.
7 Q. Why are you comfortable with that?
8 A. I'm comfortable with that because if you
9 look at market-to-market transaction in the Ipsos
10 study, it does not -- it does not pay users based 07:50:38
11 on the amount of -- the amount of data that they
12 transmit to Google. And that's, I think, the best
13 comparable transaction to -- to use for my actual
14 damages.
15 Q. Is it fair to say, then, that you do not 07:51:03
16 believe actual damages varies depending on the
17 severity of the privacy intrusion on a
18 class-member-by-class-member basis?
19 A. I don't think that that's fair to say. I
20 think that it -- what's fair to say is my 07:51:17
21 calculation is, at the -- at the end of the day,
22 conservative and is the best available calculation
23 based on the information that was available.
24 We talked about this earlier, that
25 there's not information available as it relates to 07:51:33

1 that in this case. And so it's not something I 07:51:36
2 could have studied.

3 Q. Okay.

4 A. Even -- even if -- even -- even if it's 07:51:47
5 something that I needed to.

6 Q. So leaving your personal beliefs aside, I
7 will ask it differently.

8 Your opinion on actual damages, in fact,
9 does not vary depending on the severity of the
10 privacy intrusion that a class member experienced; 07:52:04
11 is that fair to say?

12 MR. LEE: Objection. Asked and answered.

13 THE DEPONENT: It -- it does not -- it
14 does not vary based on the data, the amount of data
15 that was ill-gotten, as you -- as you had put it 07:52:15
16 earlier.

17 Q. (By Mr. Santacana) And it does not vary
18 based on the nature of the ill-gotten data, right?

19 A. Well, I feel like we're always talking
20 about SWAA data here, so -- 07:52:29

21 MR. LEE: SWAA-off data?

22 THE DEPONENT: SWAA-off data.

23 Q. (By Mr. Santacana) I'll be more
24 specific.

25 A. So there's no variance in my opinion. 07:52:36

1 Q. It does not vary based on the degree to 07:52:38

2 which the ill-gotten SWAA-off data is more or less
3 private to that person?

4 MR. LEE: Objection. Vague as to
5 "private." 07:52:49

6 THE DEPONENT: It -- I mean, I think -- I
7 think you understand, my -- my calculation does not
8 vary based on -- based on a particular person.

9 It -- it only varies based on the number of devices
10 that someone might have. 07:53:06

11 Q. (By Mr. Santacana) On that subject, why
12 did you decide to make it per device, since people
13 don't usually use, except for me, two devices at
14 once?

15 MR. LEE: I was going to say. 07:53:19

16 THE DEPONENT: I think that -- I think
17 that it's most similar to the Ipsos study, and I
18 think that that -- that that's an appropriate way
19 to consider that.

20 If people -- if people do have multiple 07:53:34
21 devices, and they use them for different things,
22 then they may look at their privacy as it relates
23 to those different devices --

24 Q. (By Mr. Santacana) I see.

25 A. -- on a device-by-device basis. 07:53:47

1 Q. You opined in the Brown case that you 07:53:55

2 referred to earlier that the actual damages in that
3 case was \$3 per device, right?

4 A. In the Brown case?

5 Q. Uh-huh. 07:54:09

6 A. No, I don't think that that's correct.

7 Q. What was your actual damages opinion in
8 that case?

9 A. Can I --

10 Q. Wasn't it based on the Ipsos panel? 07:54:22

11 A. Yes, it was.

12 Q. But the number was not \$3 per device that
13 you arrived at?

14 MR. LEE: You were going to ask me a
15 question -- you were going to say something -- 07:54:34

16 THE DEPONENT: Yeah. I'm worried -- I
17 don't know, like, what I can say or what I can't
18 say.

19 MR. LEE: That's what I thought you were
20 concerned about. So there are protective orders in 07:54:40
21 both cases, and I think we have to be very careful,
22 because I don't want to have Mr. Lasinski
23 inadvertently reveal something that he shouldn't.

24 When you talked about some areas that I
25 thought there was overlap and there wasn't any 07:54:59

1 confidentiality concerns, I let it go. But I don't 07:55:02
2 know where this is going.

3 But I think Mr. Lasinski seems concerned,
4 so --

5 MR. SANTACANA: Well, you're using my 07:55:13
6 time right now. If you don't have an objection,
7 then I'm going to keep going.

8 MR. LEE: Okay. I might -- I might have
9 him not answer. But -- but keep going, and we'll
10 see. 07:55:21

11 Q. (By Mr. Santacana) Okay. Your opinion
12 in that case was actual damages was \$3 per device
13 per month; is that right?

14 MR. LEE: Go ahead.

15 THE DEPONENT: I don't think so. I don't 07:55:36
16 think that's right.

17 Q. (By Mr. Santacana) What do you think it
18 was?

19 A. I think -- I think, if I remember
20 correctly, it was \$3 per Web extension per month. 07:55:47

21 Q. Okay. Well, it wasn't.

22 A. Okay.

23 Q. But --

24 A. Well, I don't -- I don't remember,
25 obviously. 07:56:08

1 Q. Sounds like. 07:56:10

2 But you relied on that same Ipsos study
3 to evaluate actual damages in the Brown case,
4 right?

5 A. I did, yes. 07:56:18

6 Q. And the -- the figure that you came up
7 with was \$3, and it was per something?

8 A. Correct.

9 Q. And to your memory, it was not per
10 device; it was per something other than per device? 07:56:28

11 A. I don't really remember, to be honest,
12 what it was.

13 Q. Why in that case did you arrive at \$3 as
14 the amount? Was that a coincidence, or did your
15 calculations in that case mirror your calculations 07:56:41
16 here?

17 MR. LEE: Beyond the scope of redirect.

18 Go ahead and answer.

19 THE DEPONENT: I think -- I think in that
20 case, I believe -- I think in that case, it was -- 07:56:54
21 there's \$3 in the Ipsos study that relates to the
22 Web browser -- to Web browser. And I think that
23 that's what I was using in that case, not -- not
24 device.

25 But I -- to be honest, I don't -- I don't 07:57:13

1 recall. 07:57:17

2 Q. (By Mr. Santacana) Okay. Then I --

3 thank you for that clarification.

4 What I was asking was just, was the fact
5 that you ended up at \$3 per something, just the 07:57:24
6 fact of the number 3, was it a coincidence that
7 that was 3, and it's 3 in this case? Or is there a
8 reason that they mirror each other?

9 MR. LEE: Beyond the scope of redirect.

10 Go ahead. 07:57:38

11 THE DEPONENT: I don't know that it's
12 actually -- I don't know that it's actually a
13 coincidence. I think if you look at -- it's not a
14 coincidence, because the Ipsos study has \$3 per Web
15 browser, if I remember correctly. And in this 07:57:50
16 case, it has \$3 per device, mobile phone and
17 tablet.

18 So I was looking at different data points
19 within the study, if I remember correctly.

20 The fact that they're paying -- the fact 07:58:02
21 that it ends up being \$3 is because those users are
22 being paid \$3 based on the study.

23 Q. (By Mr. Santacana) I see. Okay.

24 MR. SANTACANA: That is all I have.

25 MR. LEE: Me, as well. 07:58:26

1 THE VIDEOGRAPHER: Okay. 07:58:27

2 MR. SANTACANA: I will designate
3 "Attorneys' Eyes Only." And you can take your time
4 on the transcript.

5 THE VIDEOGRAPHER: We are off the record 07:58:36
6 at 7:58 p.m., and this concludes today's testimony
7 given by Michael Lasinski.

8 The total number of media used was eight
9 and will be retained by Veritext Legal Solutions.

10 (TIME NOTED: 7:58 P.M.) 07:58:51

11

12

13 -----o0o-----

14

15

16

17

18

19

20

21

22

23

24

25

1 I, MICHAEL J. LASINSKI, do hereby declare
2 under penalty of perjury that I have read the
3 foregoing transcript; that I have made any
4 corrections as appear notes; that my testimony as
5 contained herein, as corrected, is true and
6 correct.

7 Executed this _____ day of _____,
8 2020, at _____, _____.

10
11
12 _____
13 MICHAEL J. LASINSKI
14
15
16
17
18
19
20
21
22
23
24
25

1 I, Rebecca L. Romano, a Stenographic Certified
2 Shorthand Reporter of the State of California, do
3 hereby certify:

4 That the foregoing proceedings were taken
5 before me at the time and place herein set forth;
6 that any witnesses in the foregoing proceedings,
7 prior to testifying, were administered an oath;
8 that a record of the proceedings was made by me
9 using machine shorthand which was thereafter
10 transcribed under my direction; that the foregoing
11 transcript is true record of the testimony given.

12 Further, that if the foregoing pertains to the
13 original transcript of a deposition in a Federal
14 Case, before completion of the proceedings, review
15 of the transcript [] was [X] was not requested.

16 I further certify I am neither financially
17 interested in the action nor a relative or employee
18 of any attorney or any party to this action.

19 IN WITNESS WHEREOF, I have this date
20 subscribed my name.

21 Dated: July 5, 2023

22
23 
24

25
Rebecca L. Romano, RPR,
CSR. No 12546

1 Eduardo Santacana

2 esantacana@willkie.com

3 July 5, 2023

4 RE: Rodriguez, et al. v. Google, LLC

5 6/29/23, MICHAEL J. LASINSKI, JOB NO. 5971107

6 The above-referenced transcript has been

7 completed by Veritext Legal Solutions and

8 review of the transcript is being handled as follows:

9 ___ Per CA State Code (CCP 2025.520 (a)-(e)) - Contact Veritext
10 to schedule a time to review the original transcript at
11 a Veritext office.

12 ___ Per CA State Code (CCP 2025.520 (a)-(e)) - Locked .PDF
13 Transcript - The witness should review the transcript and
14 make any necessary corrections on the errata pages included
15 below, notating the page and line number of the corrections.
16 The witness should then sign and date the errata and penalty
17 of perjury pages and return the completed pages to all
18 appearing counsel within the period of time determined at
19 the deposition or provided by the Code of Civil Procedure.

20 ___ Waiving the CA Code of Civil Procedure per Stipulation of
21 Counsel - Original transcript to be released for signature
22 as determined at the deposition.

23 ___ Signature Waived - Reading & Signature was waived at the
24 time of the deposition.

25

Federal R&S Requested (FRCP 30(e)(1)(B)) - Locked .PDF

Transcript - The witness should review the transcript and make any necessary corrections on the errata pages included below, notating the page and line number of the corrections. The witness should then sign and date the errata and penalty of perjury pages and return the completed pages to all appearing counsel within the period of time determined at the deposition or provided by the Federal Rules.

X Federal R&S Not Requested - Reading & Signature was not requested before the completion of the deposition.

1 Rodriguez, et al. v. Google, LLC

2 MICHAEL J. LASINSKI (#5971107)

3 E R R A T A S H E E T

4 PAGE _____ LINE _____ CHANGE _____

5 _____

6 REASON _____

7 PAGE _____ LINE _____ CHANGE _____

8 _____

9 REASON _____

10 PAGE _____ LINE _____ CHANGE _____

11 _____

12 REASON _____

13 PAGE _____ LINE _____ CHANGE _____

14 _____

15 REASON _____

16 PAGE _____ LINE _____ CHANGE _____

17 _____

18 REASON _____

19 PAGE _____ LINE _____ CHANGE _____

20 _____

21 REASON _____

22 _____

23 WITNESS

Date

[& - 2.1.]

&	274:13 276:11 296:1 1,500 14:15 1.57 172:18 173:6 10 127:10 128:6,9,10 241:3,4	165:21 13.1. 153:13 155:1 161:14 13.2 155:2 13.2. 155:2 156:18 13.87 173:4 175:2	160 13:25 163 7:20 166 165:18 17 7:24 172:16 180:17 174 8:4 18 142:21 1:11 110:8 1a 16:23
0	0.3 206:24 0.5918 205:22 206:7 00188768 7:18 04688 1:6 2:6 9:18	100 3:7 101:23 105:14 127:9 133:17 157:2 158:5 159:3 162:19 248:12 249:18 264:16	130 49:20 60:8 241:16 253:6 1301 4:18 131 253:6 132 253:6 263:16 14 121:15 145:18 146:2,5 146:25 150:8 158:10 14.1. 152:10 14.5 146:12 147:17 148:11 151:24 155:24 156:7 157:8 140 7:17 15 121:15 138:21 139:6,8 140:5,7 156:23 169:4 180:17 180:21,25 181:16 15.1. 138:23 150 12:23 156 24:20 16 7:13,24 172:3,9 180:17
1	1 1:16,25 7:3 7:13 9:13 16:19,22 71:14 81:2 84:15 88:9 94:18 95:15,20 96:1 104:12,13,14 118:16,20 128:2 151:3 158:20 178:20 184:18 186:9 186:11,16 189:24 190:4 190:16 203:10 203:12,19 207:10 211:23 212:8 213:13 217:17 218:12 218:14 258:16 271:2 274:12	10:19 2:18 9:2 9:6 116 84:8,9,12 84:12 11:44 71:15 12 7:5,24 181:6 258:16 12/1/2022 155:10 120 73:12 85:5 85:7 89:7 121 85:2 86:12 12546 1:21 294:25 12:04 71:20 13 121:14,15,15 173:3 175:11 13.1 152:14 153:11 154:3 155:6 165:16	2 7:17 71:18 80:13,14 81:1 81:17 82:4,5,7 82:8,9 83:9 84:6,14,16 87:9,10,14,16 89:21 94:3 95:15,21 96:1 101:15,20 102:1 103:24 104:10,10 105:2,8 108:18 109:8 110:8 115:6 118:13 118:18 120:10 121:1 125:17 127:7,8,23,24 128:4 135:15 135:17 136:3 137:4 140:9,10 186:12 218:12 257:13 2.1 180:11 2.1. 179:25 180:9

[2.2 - 5]

2.2 152:19 153:5,22 161:17 164:2 20 7:14 123:21 276:1,2 20-0466 1:22 200 12:23 13:25 73:11 201 4:8 2016 153:15 154:23 2019 92:12,14 93:13,14 2020 145:19 293:8 2021 157:11,15 157:23 2022 165:24 172:17,22 173:3 174:21 216:6 2023 1:15 2:18 7:15 9:1,6 294:21 295:3 2025.520 295:9 295:12 21 167:9,19 174:14,16 175:3 212 4:20 215 154:23,25 219 227:19 223-5505 4:11 23 175:25 177:21	25 123:22 270 7:6 276 7:7 28 204:19,21 205:1,2 210:3 210:10 227:21 227:22 266:17 2800 3:8 29 1:15 2:18 9:1 293-6800 3:18 297 1:25 29th 9:6 2:06 110:13 2:56 144:5 3 3 7:20 54:23 57:8,10 59:6,6 59:12,14,22,22 59:22 60:24,24 63:3,10,11,25 64:11,18,24 65:4,7,8,21 66:1,7,8,17 67:9 68:6,7 70:6,7,7,14,14 110:11 144:5 163:20 171:24 172:2,4 233:5 242:7 247:1,3 248:15,22,25 249:8 251:18 251:20 252:6 252:16 254:9 255:11,11	256:19 257:10 257:11 258:12 259:1,7,11 260:19 261:4,5 261:9,10,15,16 261:17,19,24 262:4,9,15,23 262:24,24 263:1,8 264:15 265:8,19,25 266:19 267:7 267:16,20 275:25 282:10 282:14 284:23 288:3,12 289:12,20 290:7,13,21 291:5,6,7,7,14 291:16,21,22 3.01 262:20,23 30 296:1 305 3:10 32 167:18 33131 3:9 336-8330 4:20 33602 4:10 3491 1:23 34th 2:16 5:9 9:20 357-8434 3:10 37 85:21 38 85:1 88:2 89:22 90:16,17 91:6,8	39 90:25 91:1 3:05 144:10 3:20 1:6 2:6 9:18 3:57 174:3 4 4 8:4 17:4,13 17:16,22,25 18:3 144:8 174:3,9,12 175:25 180:20 260:7,10,17,22 261:7 264:16 40 12:13 73:4 41 91:2,20 93:1 105:23 106:1,3 415 3:18 5:11 41st 3:16 42 106:11 44 3:15 45 183:20,23 185:18,20,20 185:24 187:15 47 230:14 48 23:14 49.58 89:3 49.78 88:20 4:00 103:5 4:06 174:8 4:45 200:4 5 5 174:6 209:2 264:16 294:21 295:3
---	--	--	---

[5,000 - account]

5,000	116:17 117:3	6:15	230:7	89	165:9 166:5 167:19 168:12 168:19	129:25 136:16 137:10,13 147:3 183:16
50	86:9	6th	4:18			
50.24	86:13		7		9	185:6 187:5,11
50.4	88:20	7	230:5	9	177:18,20	192:23 202:1
50.42	85:17 88:25 89:5,9 89:13	71	95:1	9.39	174:23 175:25	213:10 218:6 244:21 245:2 274:15
52	87:3 204:9 204:10,13,24 205:5,11,13 206:16,19 207:1,1,11,19 208:3,11 209:5 209:9 210:2,9 210:21 211:5 211:11 224:24 225:5,10,12,15 229:2,15	72	76:19 77:3	9/1/2022	155:9	above 139:6 191:25 295:6
53	92:7,10	73	95:12	90	127:12 167:19 235:8	absolutely 264:16
55	173:16 182:4 185:21 186:22 204:12 209:3,8,9 212:9,11,12	7321	294:24	94104	3:17	accept 65:25
5971107	1:24 295:5 297:2	75	82:7	94111	5:10 9:21	105:7 115:14 232:2,7 242:2
5:09	200:9	78.77	89:16	a.m.	2:18 9:2,6	251:2 263:23
5:58	230:2	7:05	269:17	ability	40:3,16	263:25 264:3
6		7:30	269:22		77:23 78:13	265:19 266:19
6	72:4 200:7 230:2 266:16	7:43	283:9		104:16 117:10	267:7,17,20 282:13
6/29/23	295:5	7:48	283:12		117:12 119:14	accepted 65:21
63	138:18,20,22 138:25 140:14	7:58	292:6,10		127:1 148:10	66:17 67:21,24
		7th	4:9		158:2 160:18	67:25 149:19
			8		188:14 192:14	243:21
			8		195:22 201:23	accepting 27:22
			813		able 30:17	access 44:9
			82		44:21 47:4	48:16 54:4,7,7
			142:24		57:15,15,18	54:15,15,17
			82.18		78:24 84:23	123:1 190:1
			143:25		87:18,18,19,22	accomplish 200:17
			82.2		92:14 96:7,21	account 97:15
			137:22		96:22 100:15	98:17 104:6
			138:3 139:19		100:20 104:11	109:25 114:16
			140:16 141:10		105:9,14 112:1	
			142:9 144:12		114:1 118:15	
			144:17 145:3		119:10 129:8	
			827			
			85			
			858-7421			
			5:11			
			87			
			137:16,21			
			88			
			137:19,21			
			141:7 144:13			

[account - ad]

118:7 131:10	163:24 167:11	241:20	119:1 128:22
131:15 132:7	168:6,17	actual 17:10	128:23,24,25
133:9,12	170:15 171:6	20:9 41:22,24	128:25 129:3,4
145:18 154:15	175:1 188:7	42:8 47:15	129:4,10,19,19
156:22 157:16	195:5 202:10	49:22 50:5	130:1 132:10
178:25 180:3	202:24 208:21	51:17,22 54:9	132:13,14,17
181:20 203:16	209:16,19,21	55:1,2,4,5,6,9	134:18,18,20
210:3,10	229:15 231:7	55:16,17,18,19	134:21 140:6
237:22 246:4	273:9,12	56:11 57:10	141:12 143:23
247:7,20	accurately	58:3,20 59:21	145:1 146:2,8
248:16,21	171:15 212:17	60:19 61:12	172:22 176:8
263:22 268:12	achieve 121:3	63:2,10 65:9	177:14 178:10
accountant	aci 172:12	92:23 105:2	179:21 188:23
281:1	acquired 44:9	123:1 129:1	199:20 204:20
accounted	44:11 45:5,6	134:8 146:5	212:24 216:19
161:6	46:16,20,23	177:3 207:1,3	218:21 250:20
accounting	acquiring 45:5	217:7 218:25	250:20 251:9
47:22 83:3	acquisition	230:9,17 231:6	291:12,12
248:18 280:25	44:10 81:20	232:11 234:9	ad 29:17,19,20
281:15	88:6 93:20,21	243:11 246:25	30:4,5 32:7,12
accounts	120:17 141:13	257:6 259:4	32:19,19,25,25
152:15,25	161:18 168:16	279:1 284:23	78:18 82:15
153:6,15,18	acquisitions	285:13,16	84:2,23 86:14
154:2,9,11,14	24:13	286:8 288:2,7	86:18 87:1,14
154:23,24	action 10:2	289:12 290:3	90:12,12,16,17
155:5,18,21	294:17,18	actually 15:5	90:19,20,21,22
156:17 161:20	actions 16:2	29:20 32:24	91:3,4,11,17,19
163:5 165:22	active 153:14	33:14 37:10	91:22,23 92:1
167:10 283:17	154:2,23 155:5	51:8,10 57:20	92:12,15,17,22
accurate 25:21	activity 43:15	57:20 59:8,11	92:23,25 93:6
62:18,19,24,25	49:25 50:2,14	60:25 65:3,6	93:10,18,24
98:21 99:9	72:6,6,8,14	67:5,7 68:5	101:20 102:3,4
100:5 115:9	106:3,7,12,19	71:23 83:23	102:5,6,10,14
119:23 120:16	108:8 230:20	85:4 93:17	102:21,24
127:23 160:16	231:15 241:19	95:10 118:25	103:1,2 105:3

[ad - advertiser]

105:9,17	229:5	ads	30:5 33:10	118:20,20,21
109:20 110:25	additional	72:16	74:18	120:12 125:3
112:18 113:3	213:16 245:8	77:23	78:13,15	125:14,25
114:7,19 115:8	254:7,11	78:22,24	79:2	127:1 128:2,2
115:23,24,25	257:15	79:3,4,4,7,18		128:5,23,24
116:17,24	additive	79:22,24	80:3	129:8,9,19
120:7 121:5,13	address	80:7,11,15,17		134:13 135:25
124:15 125:24	addressing	80:19	81:3,7	140:18 166:7
126:5,25	114:23	81:18	82:1,3	168:21 170:22
127:17 128:15	adjust	82:22,23,24		170:25 171:3,4
135:21,22	253:14	83:4,5,6,10		177:7,8 178:3
136:1,8,9,16,18	adjusted	84:19,23	87:2	182:2 187:8,10
136:22,22	167:10	87:11,19,20,21		188:9 189:7
137:1,3,5,6,10	adjustment	87:23	88:5	190:7 191:10
137:11,13	81:24 168:23	89:21,22,24		191:15 199:6
140:18 156:22	254:7	90:1,5	91:10	205:15,20
163:25 176:1	adjustments	91:12,22,24		206:20 209:14
181:21,25	254:13	92:1	94:6	210:13 212:12
182:4,9,13,21	administered	101:5,9,11,15		228:25 229:5
182:22,22	12:2 294:7	103:25	104:6	247:15,21,21
183:10 184:16	administrative	104:22	106:18	248:19 253:10
184:19 185:1,2	26:16,21	107:18	108:6	253:12 270:25
186:13,19,22	admit	109:4,20,25		271:7,11,14
187:24 188:2,5	admob	110:17,24		272:1,4,5,10,16
189:19 191:8,8	84:23 88:5	111:4,6,13,18		276:10,13
191:18 192:15	89:22 90:19,20	111:21	112:1,7	advertise
193:5,14,16	90:22 91:11,16	112:10,12,16		183:21
198:13 202:12	92:11,15,17	112:24	113:5	advertisement
206:12,16	93:1,3,20 95:9	113:15,15,21		30:25
208:6 209:5	110:25 112:4,7	113:25	114:2	advertisements
210:4,11,22	115:8 120:7	114:17	115:7	82:14 190:25
212:9 215:1,25	135:22 136:1,9	115:14,21		advertiser 30:4
217:4,4 271:20	140:18 156:23	116:15,16,22		32:6,9 33:8
addition 35:13	191:17 208:5	117:11,12,14		111:17 112:11
47:10 57:24	209:5	118:14,17,19		112:22,25

[advertiser - allowing]

113:1,13 114:6	218:23 271:6	afterward	280:10 281:23
114:12,16	271:11,14,18	16:23	289:14 290:18
115:11 117:7,8	271:25 272:15	ago 199:24	291:10
117:9 118:10	274:23 275:3	200:2 250:14	air 173:23
118:10 121:2,8	281:15,17	agree 9:11	al 1:4 2:4 9:15
121:11,17	advertising	20:17 62:15	295:4 297:1
124:13 125:3	36:8,14,16,24	75:18 76:9	alex 148:6
127:8,12 128:5	37:13 38:2,11	136:12 145:22	algorithm
129:14 179:4	38:16,20,24	149:4 163:23	183:4
181:21,24	39:9,17,25	189:3 196:19	algorithms
182:17 184:15	83:12,17,18,19	210:18 220:11	29:8 119:3,4,8
184:23 185:5	83:24 86:8	230:23 232:4	119:11,16
185:12 187:7	109:19 113:24	232:10 233:18	177:6
192:5 193:5,25	114:10 120:6	234:8,14 236:4	allege 203:1,3
270:14	122:13 124:19	239:22 245:17	alleged 24:25
advertiser's	124:24 127:18	249:15 261:6	95:7 99:19,25
115:12 116:3	129:17 133:19	266:6 282:4	100:10,14,19
177:24 178:2	135:3,6 136:20	agreeing 196:9	104:8 149:14
185:4	171:8,12,14	236:15 275:24	194:8 198:23
advertisers	172:18 174:22	agreements	203:8 213:5
29:11,19 30:14	175:8 176:19	44:17 46:2	215:18 273:5
32:24 111:4	187:21 192:6	245:24	allegedly 63:5,9
115:23 117:13	194:1 197:8	agrees 245:25	99:5 243:15
118:2,7 119:20	201:6,9 228:21	ahead 15:20	alleviate 147:1
119:25 120:2	228:22 247:20	16:25 26:11	allocate 124:24
120:13 124:23	248:3,10	57:3 61:21	allow 10:17
125:23 126:6	251:21 252:24	63:13 64:8	50:1 72:15
126:15 127:2	affect 200:23	108:13 115:4	92:19 238:22
177:7,13,21	270:25	117:5 134:1	241:19 252:22
178:9 187:3,4	affected 257:2	145:13 146:18	253:1 274:2
187:21 189:7	affiliations	146:19,20	allowed 160:22
189:21 190:24	10:8	156:10 197:16	184:17 193:12
193:13 198:4	afternoon	233:2 244:16	197:4 275:19
203:1,13	270:3	252:20 260:25	allowing 237:1
217:10 218:3,4		263:13 267:23	237:2

[allows - answer]

allows 32:1,5,6 91:25	analogous 41:4 41:8,12 42:2,5	256:7 259:3 260:10,12	anibal 1:4 2:4 9:15
altered 109:8	74:10,14 76:10	262:13 272:24	anindya 6:7
alternative 97:25 132:4,8 214:10	76:14 200:16 201:18 228:21	analytic 236:8	ankura 6:16 14:16,18,21 15:3
altogether 14:13	analogy 132:20	analytics 170:23 180:5	ankura's 14:22
amazon 37:14 37:23	analyses 36:23 37:1 40:24	183:2 197:1 198:5 234:16	annual 165:22
amount 54:6 62:13 63:22 64:2,4 65:9 66:5 68:10,11 68:17,17 70:10	74:10,14 75:4 75:11 76:22	234:18,24 235:4,5,13,15	answer 17:2 37:17 40:13
70:10,20 113:14 115:13 117:21 119:20 119:24 120:3,5 120:11,14	91:18 95:9 122:20 152:1 203:7	235:17 236:16 238:1,2,7,9,17 239:13,14,22	43:18 46:3,5 50:19 53:17 59:18,25 60:1
121:9,12 124:17,22 127:3,4 129:16 130:2 140:23 164:18 188:24	analysis 6:5,6 6:14 37:2 42:7	240:7,17 242:24 243:20	60:5 61:21 63:13 67:14
207:3,3 212:24 246:12 247:1 254:19 255:18 256:16 261:4,5 271:19 285:11	77:15,16,16 78:7,10 80:6 80:10 91:25	245:18 246:1 270:16,21	69:13 79:12,15 108:13 109:13
285:11 286:14 290:14	92:5 93:22 118:11 131:2,5	analyze 59:17 110:4 118:6	110:4 123:2 138:9 151:14
amounts 62:16 244:8	132:1 133:8 140:23 141:14 145:17 150:3 151:19 152:16 152:17,20	149:21 159:4 160:23 176:7 192:21 217:10	157:3 158:22 158:24 159:4 164:12 185:19
	158:9 163:2 167:6 173:10 177:6 180:2 194:15 195:19 197:8 199:13	218:3 233:12 262:3	188:13 196:6 208:8,10
	199:16 208:1 213:13 217:6 218:15 229:9 231:23,24	analyzed 216:7 216:9 218:10 218:20,25	217:20,24 221:6 224:9
	245:21 250:19	219:6	225:18 227:4,6
		analyzes	240:3 250:18
		191:12 200:21	250:24 254:15
		analyzing	254:23 255:14
		76:11 213:16	260:10,15
		246:10 247:7	262:3,14
		android 237:25	265:23 266:11
			267:1,11
			268:17,18

[answer - appropriate]

279:12 280:6,6	90:20 91:12,13	235:21,21,23	apply 161:17 166:19 167:21
281:3,25	91:16,16,19	236:2,5,17,20	195:19
282:17,20,25	92:11,12 93:2	236:24 237:2,3	applying 191:16 209:4
283:4,18	93:7,10,19	237:12,24,25	apportioning 18:8
284:18 289:9	95:8 103:3	238:9,14,16,22	apportionment 18:10 141:2,3
290:18	104:22 106:3	238:24,25	165:14,24
answered	106:18 108:5,6	239:14,15,18	167:9,21
56:22 57:2	108:7 109:3,20	239:21,21,23	211:17
61:19 63:12	112:2 136:8,19	240:6,9,11,21	apportionme... 81:21
64:7 69:11	137:23 138:4	240:24 241:2	appraise 46:23
79:8,14 145:8	140:3,4 141:9	241:20 242:21	appreciate 67:14 220:15
192:17,19	141:12 142:18	243:22 244:14	225:13
196:5 220:24	143:14,21	244:15,17,21	appropriate 40:4 51:20
220:25 252:8	144:18 145:4	245:3,11,18,25	55:9 56:5,16
254:24 255:22	152:17 156:15	246:2,17	56:25 57:6
258:13 259:20	156:23 161:18	app's 177:15	61:14,17 62:4
259:21 260:24	162:10 164:2	239:22	64:4 65:8
278:12 280:5,9	166:20 167:21	appear 90:20	67:10,13 68:10
286:12	168:13,25	91:19 293:4	70:9 76:16
answering	171:3 177:15	appearance 10:6	77:14,17 78:10
58:23 97:8	177:24 178:2	appearances 3:1 4:1 5:1 6:1	78:11 95:5
158:2 204:22	178:11,16,20	10:8,11	118:13 199:19
273:8 282:1	178:21 179:3	appearing 10:10 295:18	208:4 209:12
answers 96:15	180:2,3 181:21	296:7	229:16 231:13
anybody 198:6	182:1,4 185:11	apple's 157:19	231:18 234:1
anymore 126:2	186:19 189:8	applicable 199:11	252:17 259:8
215:20,24	190:18 191:3	applied 47:7 86:12 165:15	260:4,7 261:4
apart 15:1	191:17 192:6	applies 106:12	261:5 262:4,16
17:15 33:13	197:2,8 198:3	277:11	
38:20 226:24	198:14 203:25		
app 50:2 71:1,8	208:24 212:19		
72:5,14 84:14	213:4,7 217:2		
84:18,22 85:17	229:9 231:14		
85:22 86:2,8	234:25 235:12		
88:7 89:23	235:16,18,19		

[appropriate - assumption]

264:25 266:5	area 29:15 30:1	105:13 107:2,5	assume 25:1
275:10 278:6	32:3 39:25	110:2 115:5	47:23 58:8,19
278:15,23	101:23 280:12	123:8,23	81:2,6 96:6
279:3,11 280:3	areas 24:16	126:12 132:24	101:2 109:23
280:23 281:6	25:15 41:11	133:3 134:3	110:2 119:19
281:10,19,24	82:15 288:24	149:17 150:4	135:20,25
282:9 287:18	arrangement	150:23 151:22	150:9,15,23
approximate	38:13	167:14 173:5	157:12,14
205:14,19	arrive 75:21	174:21 175:10	188:15 192:13
approximately	89:14 95:22	175:13 197:10	197:10 203:12
12:13 15:24,25	254:21 255:20	214:7 227:9	203:15 235:19
86:9 182:3	290:13	250:16,23	236:7,12 237:5
206:24	arrived 259:12	258:18,20	237:13 240:1
approximation	260:14 288:13	264:19,22	263:14
209:13 266:16	arriving 248:21	278:2 281:2,3	assumed
apps 39:17	aside 286:6	281:13 291:4	134:25,25
40:1 50:1 72:8	asked 19:8 57:2	aspect 256:24	135:2,3,23
72:16,17,18	59:5,24 61:19	aspects 75:14	136:24,25
92:2 93:3	63:12 64:7	assessing 17:6	137:2,2 203:7
104:1 106:7,13	69:11 90:13	assessment	assumes 127:5
106:19 112:4	93:17,17 145:8	74:18 76:23	assuming
116:15 125:20	192:17 196:4	77:4	189:11 237:8
133:18 230:20	199:24 220:9	assigned 59:6	242:15 256:12
234:18,23	220:24 252:8	assignment	assumption
235:3 236:15	258:13 259:20	16:14 17:3,5	78:21 87:13
241:19 245:6,6	260:24 271:18	17:16,25 18:2	94:4,9,19 96:6
245:7,9,17	273:2,25	18:4,6,14,21	100:12 107:21
272:11,11	274:23 275:15	20:14 48:7	107:23 108:2
apps's 177:15	276:17 278:3	216:15 217:1	115:17 120:9
appsflyer 184:9	279:9,25 280:9	217:10,15	168:18 169:11
184:12 235:14	281:7,11	218:2 221:14	169:22 190:3
242:8	286:12	associate 5:20	190:10 202:18
april 157:11,14	asking 12:8	associated	207:19 208:11
157:23	38:19 52:7	24:25 106:8	209:6,8 212:23
	102:2,18	216:23	216:13,14

[assumption - based]

253:8	212:12,18,25	automation	271:24 272:18
assumptions	213:2,5	29:25	272:23
94:15 103:23	attribute 191:7	available 18:11	b
118:14 121:1	attributes	51:18,21 56:3	b 7:10 8:1
147:13 246:16	119:13	56:16 57:5	296:1
277:15	attribution	58:7,8,13,19	b25 143:20,21
attached 16:20	181:17	61:16 63:16	b4 143:12
140:11 163:21	audience	74:25 81:21	b43 143:12
174:10	124:14 126:1	83:24 84:24	back 66:14
attempt 20:13	127:9,10 128:6	94:1 98:1	71:19 85:4
50:16 126:4,17	audio 9:10	116:12 118:12	89:20 94:7,23
134:14 158:8	authority 48:22	137:3 140:4,9	94:24 110:12
217:25 231:9	48:25 49:2,7	159:16,21	119:17 120:21
232:16,20	autobidding	183:4 192:2	124:12 144:9
attempted	119:9 205:6,16	201:2 208:24	144:13 158:25
31:19,22 167:2	207:12,14,16	234:13 259:10	173:20 174:7
232:12	207:20,21	261:2 265:3	174:20 181:16
attempting	208:13,14	280:17 285:22	189:3 200:8
84:13 96:2,3	222:9,12,16,25	285:23,25	214:18 223:22
243:6	223:5,13 224:2	avenue 4:18	230:6 247:13
attempts	224:12,25	average 165:21	269:21 283:11
250:25	225:6,15,17,20	266:1	baked 100:12
attention 95:11	225:21 226:2,8	avoid 50:17	bargain 239:21
230:9	226:18,20	aware 39:15,20	244:19
attorney 3:6,14	227:3,17 229:7	39:21 48:22,25	based 15:3
4:17 10:9	automated	49:2,6 56:9	30:24 34:22
294:18	29:10,12,18,18	61:2 69:21,24	42:18 45:24
attorneys 1:12	29:20,21,23,23	86:25 96:21	51:1 56:2,15
4:7 5:7 292:3	30:6,25 31:11	97:21,25 109:9	57:1,4,14
attributable	31:17,21 32:8	125:8 126:11	61:15 62:13
88:8 89:24	33:9,18 34:15	135:13 136:16	63:16 64:21,21
90:5,8,10	34:22 36:1	192:1 214:10	64:25,25 71:1
168:14,15	39:2 114:4,13	214:13,17	76:8 77:15
179:21 180:7	automatically	234:16,19,23	82:19 91:15
180:12 182:5	161:6	263:7 268:25	93:25,25

[based - bit]

118:12 132:10	basis 33:16	67:23 76:6	93:24 146:12
137:8 140:23	35:16 36:10,12	88:21 90:23	146:25 188:13
159:19 169:10	38:23 77:18	91:2 96:3	191:25 267:9
169:21 170:14	147:19,20	107:16 119:23	267:22,24
177:2,10,22	167:8,16 170:3	149:7,9 154:24	268:7,15,19
182:22,23	170:7 178:7,12	162:14,19	274:7 275:25
183:4 196:8	200:14 201:16	171:18 189:14	284:17 290:17
200:24 204:11	228:19 229:3,4	202:10,24	291:9
205:6,15	285:18 287:25	203:6 205:11	bid 29:19,22
207:12,13,16	bates 171:22	208:4,21	30:4,5 32:6,16
207:20,21	battery 72:19	209:16,19,21	32:20 33:2,7
208:13,14	beat 53:20	210:21 212:18	114:4,6,9,17
209:8 210:5,12	beginning 10:9	220:25 226:11	115:13 180:13
210:19 222:8	71:18 110:11	226:11 231:7	182:2,5,10,13
222:12,16,25	144:8 174:6	233:4 240:20	182:24 198:11
223:5,13 224:1	200:7 230:5	247:3 248:11	198:15 212:13
224:12,25	269:20 274:3	254:2,3,13	216:1
225:6,15,17,19	behalf 2:15	259:8,22	bidding 29:10
225:21,22	behavior 96:12	277:23 279:10	29:10,12,18
226:2,8,17,20	96:18 129:14	285:16 290:20	30:3,14,25
227:2,16 229:7	131:11 135:4	belonged	31:11,17,21,24
233:7 234:13	219:12 220:19	202:21	32:2,6,10,11,19
245:13,14,16	221:18 228:20	best 37:3,4	32:23 33:18
250:19 259:5,9	228:22	51:18 56:4	34:15,22 36:1
260:4,5 261:1	behaviors	60:14,18 81:21	39:2 114:13
265:2 280:16	284:20	86:20 93:25	115:23 119:16
285:10,23	belief 20:6	132:4,7 158:2	177:7,8 183:2
286:14,18	280:15	233:18 234:9	183:3
287:1,8,8,9	beliefs 286:6	250:24 255:10	bids 29:18
288:10 291:22	believe 21:6	285:12,22	115:18 179:22
bases 81:19,19	24:23 25:8	better 106:9	183:17 270:14
95:6 191:22	43:3,7 51:20	159:11 164:1	billing 210:13
basically	52:22 53:2	246:13 284:7	bit 36:9 67:15
109:21	55:19 56:2,2	beyond 33:4	108:3 159:11
	60:12,13 67:23	38:25 48:7	164:19

[black - california]

black 15:5 21:8 21:10 169:6	broadly 275:20	275:20 277:11	calculation
blinders 147:4	brought 241:9	buy 52:19	51:19 55:3,9
blocked 211:19 211:25 212:5 270:9	brown 15:16 31:7,14,16 34:1,3,7,11 39:7 43:1,6,13	101:12	57:21,23,24
blocker 135:21 136:8 137:1,5 137:6,12	43:21 47:7 288:1,4 290:3	buyer 50:23 52:17,18	59:13 60:19
blocking 206:8	browser 142:2 143:5 255:3	c	61:15,18 70:16
boies 3:4 10:14 16:9 270:4	257:12 290:22 290:22 291:15	c 3:13	70:19 78:19,21
bolds 85:21	browsers 201:9	ca 295:9,12,20	83:23,25 84:17
bonus 15:6,8 15:11 66:10 257:13	browsing 72:18	cal 41:14	84:18 92:11,24
bookkeeping 251:22	bsflp.com 3:11 3:19	calculate 30:17 30:21 31:18	129:11 130:4
boss 15:6	bucket 116:3	51:22 55:4,6	130:20 141:2
bottom 152:24 180:21,25 181:6,16	bucks 65:4 241:1	55:15,16,18	143:23 153:16
bought 112:10	budget 116:17 117:3 121:8	61:7 63:15	166:2 179:20
box 15:5 169:6 205:5	125:24 127:6	74:22 87:7,8	199:7 207:7,8
breach 232:22	128:15 133:17	130:13,15	208:2 212:15
break 46:10 65:17 71:11 103:9 111:12 173:18,19,24 196:14 199:21 199:24 229:19 229:25 269:15 282:5,18	133:19	135:10 139:23	216:5 229:17
	budgets 124:25 126:5	171:15 190:16	233:6 271:1
	bullet 82:7 95:12,14	199:17 207:5	276:3 285:21
	bullets 181:13	216:4,15	285:22 287:7
	burden 47:23	231:12 232:24	calculations
	business 75:6 111:19 113:12	258:25	34:8 41:3
	267:3	calculated	75:13 79:25
	button 99:18 135:20 141:19	30:24 48:14	80:20 83:3
		62:5 68:9	92:18 152:7,18
		80:21 81:17	155:25 156:5
		134:23 175:25	157:20 159:18
		216:23	161:23 168:9
		calculates	169:1 207:9
		140:2 175:21	223:17,20
		calculating	224:18,21
		42:16 79:19	276:14 290:15
		95:23 96:17,25	290:15
		130:2 134:7	california 1:2
		210:16 251:15	1:14,21 2:2,17
			3:17 5:10 9:1
			9:17,20 294:2

[call - ccr]

call	capture 266:1 captured 89:21 233:5 captures 233:7 care 121:4 career 12:22 careful 288:21 carefully 255:13 case 1:6 2:6 9:18 13:8,10 15:13,16 16:14 16:24 17:9,17 18:5 19:1,5,22 20:8,14 21:3 30:10 31:6,13 31:14 32:4 33:23 34:1,3 34:10,11,17,17 34:18 37:14,15 37:21,23,24 40:25 41:4,8 41:17 42:21 43:11,12 45:17 47:7,12,12,17 48:4,5,8,11 50:8,21,24 51:21 53:2,13 53:23 54:2,13 54:14,21 55:5 56:5 59:18 62:3 64:3 65:20 66:15 67:1,18 68:9 70:2,10,13	71:4 73:6,8,12 73:16,24 74:15 75:16 77:10,15 78:16 82:11 94:13,21 98:8 98:25 99:4,11 99:11,17 104:20 111:3 115:6 120:19 122:18 123:5 129:2,5 130:18 132:8,9 133:16 147:9 148:25 149:11 152:7 161:23 170:10 173:1 178:13 184:25 185:7 186:2 192:2 194:14,23 195:3 199:11 201:19,21,25 203:6,9 204:6 208:17,22 209:13 215:4 216:8 217:8 219:9 221:11 225:10 226:5,9 234:13,15 239:4 241:9,12 244:23 245:5 247:24 248:2 252:19,21 254:6 255:20 256:12,20 264:10 265:12	267:8 269:6 270:13,19 272:17 279:8 279:20 280:7 280:18 283:20 284:5,12 286:1 288:1,3,4,8 289:12 290:3 290:13,15,20 290:20,23 291:7,16 294:14 cases 15:23 16:1 30:21,22 33:14 36:13,14 36:22,22 37:3 37:7 38:2,5,9 38:21 41:1,5,9 57:9 98:3,4,14 98:23 113:3 130:9,12 131:23 133:2 186:7,7 246:15 288:21 category 235:10,12 causal 194:11 cause 188:19 192:15 193:25 199:5 causes 85:16 89:9 ccp 295:9,12 ccr 1:21,22,23
-------------	--	---	---

[cease - clarity's]

cease 197:9	165:25 166:1	239:9 240:23	202:5,18
celeste 6:13	179:1	244:8 245:8,9	203:17,23,23
cell 142:9	chance 67:24	271:10	204:9 205:3,12
cells 139:23	109:14 160:10	charges 177:2	206:6,15
143:2	161:7 251:10	check 160:7,9	208:12 211:16
cents 258:16	change 58:3,9	160:17,18,21	225:1 226:23
certain 29:16	58:19 59:3	160:22 266:13	228:1 270:8
41:11 42:1	60:23 84:5	283:22 284:2,3	chunk 264:13
54:6 57:9	96:12,21,21	checked 283:19	circumstances
67:25 74:23	145:3 146:6	283:23 284:1	217:12 218:5
75:9,14 121:2	173:4 175:16	chip 130:20,22	218:17,24
121:3 159:18	199:18 201:17	131:13 195:23	219:5 258:12
162:15,18	201:18 217:11	chips 195:13	cite 223:21
170:21 177:12	218:5,16	choice 49:25	224:22
178:9 189:9	219:12 220:19	230:19 231:14	cited 35:8,12
201:13 238:23	282:22 283:25	241:18	35:15 166:24
238:24 247:2,4	284:13,20	choose 120:13	166:25 167:1
certainly 26:25	297:4,7,10,13	160:8 177:22	168:5 226:13
34:7 41:10,10	297:16,19	189:22 238:22	226:15,17,19
64:13 65:24	changed 93:16	chooses 127:12	226:22
115:21 117:10	129:14 131:11	239:20	cites 184:7
159:16 184:2	135:4 146:8	chose 183:12	citizen 280:8
189:10 191:5	218:23 219:4	chris 14:5	civil 295:19,20
192:9 211:9	221:18	christopher 6:9	claim 99:11,17
241:25 242:1	changes 77:5	6:15 39:16	100:3,24
247:25 249:2	96:18 139:14	chrome 72:18	238:10 247:24
256:15 262:4	231:1	200:22	247:25
268:5	changing	chrome's	claims 17:8
certainty 57:18	201:13	201:13 206:9	131:16
63:15	characterizati...	chromeguard	clarification
certified 2:19	127:13 266:3	76:25 191:20	291:3
2:20 294:1	characterize	191:25 199:9	clarify 45:3
certify 294:3,16	250:25	199:10 200:11	140:13
cetera 106:10	charge 177:9	200:15,20,21	clarity's 155:8
106:10 165:25	185:1 187:12	201:8,17,21	

[class - compensation]

class 16:2 18:9 48:16 53:7 54:16,16,20 55:17,19 56:12 57:25 62:21 66:25 67:9,19 68:21 70:13,20 88:4 97:17 101:3 110:1 149:13 181:12 196:25 198:3 216:11 217:12 218:5,24 219:5 219:13 220:20 221:19 230:19 232:17 235:2,3 235:8,10 243:7 251:6 258:3 261:23 262:5,8 262:16,20,25 264:13,18,20 264:21,24,25 265:16,19 266:5,5,7,21 274:4 277:6 282:11,13,14 282:15,24 283:2,3,3 284:25 285:2 285:18,18 286:10 classes 18:9 clear 74:5 75:9 80:23 81:13 90:3 91:15,25	118:16 120:15 123:14 125:19 126:19 141:11 154:18 156:4 158:8 207:10 231:8,23 233:3 270:24 273:12 277:16 clearer 90:13 click 116:8 147:2 209:18 210:14 236:3 clicked 247:21 clicking 143:1 clicks 82:17 clients 14:19 close 209:9 229:10 closed 178:2 closer 14:15 club 104:21 107:18 108:6 code 295:9,12 295:19,20 coincidence 290:14 291:6 291:13,14 collect 82:16 241:14 278:21 278:22 281:8,9 collected 29:7 129:20 132:14 251:3 273:21 273:22 277:10	collecting 71:1 82:12 254:1,2 255:8 273:16 276:20 277:2 284:9,15 collection 72:7 72:15 106:6 181:9 263:19 263:21,23 collects 187:16 column 153:21 172:17 come 34:16 39:14 74:4 94:23 102:7 119:17 120:21 151:8,19 155:24,25 156:7 247:13 252:5 258:4 261:18,20,21 comes 35:16,25 78:25 139:19 141:9 comfortable 45:23 46:6,8 164:25 285:7,8 coming 89:20 171:9 commencing 2:17 common 188:16 279:4 communicated 221:9	companies 36:15 38:10,22 40:20,20,21 44:8 45:5 46:16 234:21 236:9,11 280:21 company 43:9 45:6 46:18 48:2,3 113:25 202:14 242:25 243:20 company's 45:6 comparability 259:5 comparable 60:7,15,20,21 64:22 66:23 67:17 68:16 246:5,7 264:10 285:13 comparables 41:17,20 51:1 51:12 compared 70:21 153:17 229:8 252:14 compass 6:12 compensated 63:3 64:15 255:11 compensation 15:1,2 66:7,13 68:4,4 149:18
---	---	--	---

[compensation - constant]

256:16 257:16	conceptual	203:8 213:6	54:25 55:10,12
compensations	168:11	272:14	55:20,24 56:17
257:16	concern 113:8	conducted	61:14 62:4
competition	284:14	231:24	65:8 68:24
114:7	concerned	conference	69:8 70:10,14
competitive	56:10 113:9	3:13 4:5,6,16	80:20 84:21
33:1	288:20 289:3	5:6 6:3	259:23 260:1
competitor	concerning	confident	261:10 266:2,4
195:7,7	181:8	229:14,16	285:22
complete 122:1	concerns 289:1	confidential	consider 24:12
163:6 167:3	conclude 77:18	45:18 46:25	39:24 40:2
completed	141:10 160:1,9	47:2,3	98:24 99:3
144:23,24	161:3 167:20	confidentiality	100:18 106:21
295:7,17 296:6	184:18 193:13	44:17 47:10	213:8 214:25
completely	200:14 201:16	289:1	245:21 287:19
167:17 189:1	213:3 218:17	confirming	consideration
193:1 195:9	218:22 219:3	222:3	40:7 41:25
213:23	concluded	confused 86:16	87:17 96:11
completeness	83:16,17 86:8	106:23 130:8	127:21
50:9 144:25	254:20 255:19	243:5	considered
completion	concludes	connection	50:12 70:24
294:14 296:10	292:6	194:7,11	75:2,4,5 97:21
complex 157:1	conclusion	consent 85:16	108:3 133:5
complicated	56:19,21 78:14	85:18 89:7,10	256:3,6,19
108:4 157:6	79:6 88:3	139:9,15	260:13 274:1
complies 11:4	167:8 168:4,19	150:11,17,21	274:19
component	170:4 209:7	156:8 169:13	considering
130:19 133:6	218:19 228:20	169:24 170:5	40:15 81:19
133:11,13	258:12 275:13	284:15	consistency
194:16,21,25	conclusions	consented	162:25 163:1
195:2,9,25	18:25 145:22	158:16	consistent 78:1
198:22 199:2,4	219:11 220:18	consequence	78:1,7 210:1
compound	conduct 24:25	101:6	235:1
275:13	63:6,9 95:7	conservative	constant 145:5
	104:8 194:8	51:7,16 52:7,9	155:15

[constraint - conversions]

constraint	contains	36:2 225:7,16	207:13,16,20
134:12,16	226:23	226:25	207:22 208:5
consult	contemplate	conversion	208:13,14,24
43:8	273:20	23:3 24:1	208:25 209:22
222:19			
consulted	contemporary	28:19 29:2,7	210:6,12,16,17
44:5	74:9	88:8 89:24	210:19,23
74:10			
consulting	context	90:6,8 104:14	211:7,17
6:4	170:10	104:14,15,17	212:19 222:8
14:16,19 15:3	205:12,16	105:3 118:24	222:12,16,25
38:13,21 40:11	contexts	119:2,14,14	223:5,13 224:1
40:22	contextual	127:20,22	224:12,25
	109:19	156:25 157:20	225:6,15,17,19
consumer	continue	157:22 158:11	225:21 226:2,8
16:1	9:10	171:13 176:16	226:17,20
42:24,24 43:4	187:7,8 271:19	176:20 177:3,3	227:2,16
43:5,10,23,25		177:5,10 179:5	228:10 229:7,7
45:8 46:13	continued	179:15,19,22	234:17 270:15
47:8 48:20	60:10 96:19	179:22,23	270:21 271:2
49:11,15 98:2	contract	180:6,13	274:15,24
98:5,8,14	106:17	181:18,22	281:14
129:13 131:10	contradiction	182:5,18,20,22	conversions
149:16	244:1	182:23,25,25	101:6 116:10
consumer's	contributed	183:7,7,13,15	118:18 119:7
49:11,15	194:22	184:4,17,20	121:4 151:3,4
consumers	control	185:2 186:12	156:6 158:10
43:15 48:24	71:22	186:17,18	158:18 177:23
49:3,7 149:5	71:24 72:7	188:10,18	178:4 180:4
149:12	controls	189:9 190:1	182:3,6,10,14
consummated	conversation	191:2,12,13	183:21 184:1,9
151:5 158:19	22:22,23 23:7	198:10 200:24	185:6,10,11
	25:3 26:22	201:1,23 202:1	186:24,25
cont'd	27:3,5,8,9,16	202:7,8,12	187:1,5,6,8,12
4:1 5:1	27:20,21,25	203:9,19,20	187:13 188:23
6:1 8:1	contact	204:1 205:6,15	189:22 190:6,7
	193:7	205:17 207:12	190:13,18,22
193:25 295:9			
contain			
226:17			
contained	conversations		
293:5	9:9 22:8,11		
	27:23 29:5		

[conversions - court]

191:9 192:7,14	70:17 81:9	260:21 262:18	246:12
193:6 195:22	83:22 88:10	272:12 276:12	costs 23:2,24
197:2 203:2,14	89:25 90:23,24	276:25 277:3	24:9,12,13,14
207:18 211:12	96:10 97:14	282:3,21 288:6	24:18,24 25:4
211:24 212:13	98:15 99:21	290:8 293:6	25:13,18,22
212:25 213:10	100:11 120:8	corrected 293:5	26:13,14,16,18
213:18 214:24	123:10,12,13	correcting	26:19,20,21
215:16,23	127:23,25	20:11	27:13,17,19
216:1,19	130:14,17	correction	28:6,7,9,12
217:14 218:7	131:7,9,14	169:16	81:20 88:6
219:14 220:21	133:15 135:16	corrections	93:20,21
221:21 247:22	136:5 139:7,16	293:4 295:14	120:17,21
270:10 275:4,6	147:11 153:20	295:15 296:3,4	131:8 133:10
278:5 280:22	158:13 159:25	correctly 21:7	141:13 161:19
281:16,17	160:2,10	43:18 80:4	168:16 179:1
convert 156:24	161:25 163:8	123:21 146:23	counsel 3:1 4:1
177:14,23	166:11 168:2	151:22 156:1	5:1 10:7 11:1
178:1,10	178:6 179:2	175:7,9,22	19:12 274:22
converted	180:14,18	176:6 206:3	295:18,21
188:2,6	186:21 188:1	211:22 228:17	296:7
cookie 202:14	189:16 190:19	289:20 291:15	counsel's 50:19
210:24 211:7	191:1,21	291:19	count 176:11
211:10,12,13	194:24 200:13	correspond	counted 161:4
211:18,19	201:11,15	95:14,19 175:2	countless 133:4
228:10	202:9 203:14	corresponding	counts 281:16
cookies 202:20	203:15 209:23	82:18 121:9	couple 65:11
206:9 228:18	211:10,13,25	172:21 173:2	coupled 164:23
correct 21:7	212:6,14 213:7	173:10	course 12:22
22:7 24:3	229:13 230:22	corresponds	21:4 34:12
30:11 33:24	232:1,19,23	120:4	103:7 156:16
35:17 36:3,4,6	236:6 239:19	cost 26:3 27:4	160:2
38:4,14,17	243:17 248:1,8	116:8,9 209:17	court 1:1 2:1
41:23 45:7	249:3 251:12	209:20,22	2:20 9:17,24
46:21 52:23	252:25 253:4	210:5,12,14	10:10,25 11:2
57:12 66:6	253:13 258:1	232:17,21	11:5 16:20

[court - data]

108:21 109:18	175:21	246:25 257:6	105:4 106:19
109:23 140:11	cv 1:6 2:6 9:18	259:5 274:13	107:18 108:8
158:14 163:21	37:9	276:3,14	108:21,21
174:10 193:11	d	279:23 284:23	109:2,22
215:15,19,21	d 7:1	285:14,16	110:17 118:9
215:22 216:10	dai 6:4	286:8 288:2,7	119:7,9,22
217:13 219:13	damage 63:11	289:12 290:3	122:1 132:15
220:20 221:20	99:22 232:12	data 41:21 42:1	134:13,22,24
274:2	273:3	43:16,23 44:1	135:6 137:3
courtesy	damages 17:10	44:11 45:6,8,9	145:1 149:5,6
220:14	20:8,9 24:16	45:11,12,20	151:11,12
covered 84:15	25:15 28:9,10	46:13,19,23	152:3,14 153:9
create 94:20	30:18,21,24	47:8,16 48:5	154:2,8,8
created 139:13	31:12,18 36:23	48:11,17,20,24	155:3,12,13,14
creative 189:18	40:25 41:3,7	49:3,8,11,12,15	162:20,22
credibility	41:22,24 42:8	49:16 50:2,7	163:1,5,9,17
267:15	42:24,25 43:4	51:3,13,15,25	164:8,9,14,22
critically 215:7	43:6 47:15	54:7,16,18	164:22,25
criticisms	49:23 50:6	58:13 59:7	165:1,7,25
145:17	51:17,22 54:9	60:14,18 63:16	169:10,12,14
crystal 74:5	55:1,2,5,6,9,16	64:2 66:25	169:21,23,25
csr 1:21,21,22	55:19 56:11	67:20 69:14,16	170:14,16
294:25	57:10,21 58:3	69:16,22 70:13	173:2 175:7
curiosity 240:3	58:20 59:22	71:1 72:18	176:5 181:10
curious 111:2	60:19 61:12	75:17 78:4,7	183:3 188:21
current 15:17	63:2,10 65:9	81:4,8,21	188:24 190:1,5
39:6	73:25 81:17	82:13,13 84:24	190:12,14,15
currently 82:21	98:2,4,10	86:24 91:16	190:17,22
82:21 113:21	133:4 158:20	94:1,5 95:24	191:9 197:21
186:23	194:19 195:3	96:4,5,8,13,19	202:2 208:23
customers	203:10 216:5	97:18,24 100:9	217:3 218:7
177:14,23	230:9,17 231:3	100:16,21	221:21 232:21
178:1,10	231:10,25	101:5,8 102:16	232:21 233:10
cut 158:18	232:1,3,5	102:17,20	233:15 234:13
159:1,7,18	234:10 243:12	104:16,20,23	235:18,22

[data - deponent]

236:14,16,24	287:2 291:18	deduct 81:18	240:19,19
236:25 237:1,2	data's 58:19	82:2 94:21	242:4 285:16
238:7,15,16,25	database	97:2 131:8	286:9
239:13 240:15	193:10,13	161:4 178:24	deponent 7:2
240:16 241:5	date 146:7,9	deducted 81:25	11:4,10 12:16
241:14,20,22	169:12,17	87:15	18:18 20:1
242:14 243:1,2	294:19 295:16	deduction	25:8 27:21
243:19 244:8	296:5 297:24	83:20 92:3,4	28:3 35:22
246:1,17,23	dated 7:14	175:20 179:3,8	37:20 39:12
247:2,4,10,15	294:21	179:9,12	42:12 44:15,20
248:17,21	day 56:1 68:15	deep 214:20	44:24 45:25
249:5,12 250:2	70:23 242:13	defendant 1:8	46:7 50:20
250:7,10,11	242:14 245:16	2:8,15 5:3 7:20	51:6 52:22
251:2,14,17,19	245:23 270:24	8:4 98:18	53:12 55:8
252:6,10,23	277:17 285:21	define 227:8,11	56:9 57:4 59:1
253:2,2,16	293:7	227:13	61:20,23 63:14
254:2,5,17	days 162:16	defined 47:21	64:9 65:24
255:10,12,18	deal 142:1	181:11	66:20 69:3,5
258:4 260:6	239:1,3 251:20	degree 247:11	69:12 70:5
262:6,10 263:9	decide 118:2,4	287:1	79:13 84:10
263:18,19,20	268:3,4,6	degrees 196:20	85:11 88:16
263:23 264:15	287:12	deleted 58:6,14	89:4 97:7
265:1,1,3,20	decided 282:20	delivery 114:9	99:13 100:4
266:20 267:8	deciding 118:8	demand 239:12	103:8,13 106:1
267:21 273:16	decipher 150:9	240:5 242:7	108:17 111:9
273:22 274:14	150:15	261:24	113:20 115:5
274:16 275:19	decision 238:13	demanded 51:9	115:17 117:6
276:20 277:2,9	decisions	51:10	124:5,8 125:8
280:21,25	124:24	denominator	126:11 131:20
281:8,18	declaration	158:10 175:24	133:22 134:2
282:10 284:8	21:9	176:9 178:19	136:12 137:8
284:15 285:1,2	declare 293:1	179:19	138:10 141:16
285:11 286:14	deduce 93:6	depend 248:13	141:21 142:5
286:14,18,20	deduced 93:1	depending	143:1,6 145:10
286:21,22		62:17 170:12	145:14 150:2

[deponent - differ]

151:18 152:23	deposition	1:13	determine	60:24 62:5,7
158:23 160:14	2:14 9:14,19		47:16 51:1,13	62:11 63:2
163:12 164:5	11:7 12:25		51:24 57:15,16	64:4,11,15
164:21 172:9	37:10,22 38:3		57:18 83:13	65:4,7 67:5
173:17 181:3	58:24 71:18		93:15 140:17	68:17 70:7,8
184:24 185:15	110:11 144:8		141:6,8 148:10	140:9 148:13
188:12 192:18	174:6 200:7		148:15 168:13	148:13 150:10
194:4 196:7,17	230:5 261:3		190:20 194:20	150:16,21
197:13,17	269:20 294:13		198:21 202:11	156:16,21,23
198:1 200:20	295:19,22,24		212:16 213:4	157:17,25
204:3 211:2	296:8,10		233:13 258:2	181:23 195:2
212:4 218:10	depositions		determined	242:7 247:5,6
219:20 220:25	12:12 148:25		48:8 49:23	252:17 254:9,9
221:16 222:23	describe	16:13	83:14 165:21	254:10,14,14
224:10 229:21	17:3 41:22		230:17 252:16	255:2,7 259:1
230:15 238:19	106:3,11 166:2		259:5 295:18	259:9,11
250:5 252:9	181:7 252:4		295:22 296:7	261:19 284:23
256:11 258:20	described		determines	287:12,25,25
259:21 260:9	17:25 18:2,7		78:25	288:3,12
261:1,9,14	233:22 234:2		determining	289:12 290:10
262:2,12 263:7	description		50:5,6 52:18	290:10,24
265:10,22	7:12 8:3 17:15		52:25 181:21	291:16
266:11,25	descriptions		243:11	devices 57:16
267:10,25	278:7		developed	61:3 66:10
268:5 272:7	design	131:16	74:22	71:5 104:1
274:21 275:14	designate	292:2	developer	106:13 147:18
278:19 280:11	designed		136:19 181:21	228:23 255:4
284:19 286:13	130:23		181:24	259:7 287:9,13
286:22 287:6	detail	18:12	developers	287:21,23
287:16 288:16	32:15 60:6		245:25	devoting 111:4
289:15 290:19	detailed	165:20	deviated	diagnostics
291:11	details	181:14	260:20	72:19
deposed 12:17	determination		deviates	diego 6:6
269:1	137:23		device	differ 50:6
			54:23	78:14 79:6
			59:6,8,14	

[differ - display]

168:20 170:12	244:8 245:15	236:8,23	discussing
170:15	251:20 255:1	disclosing	26:23 40:23
difference	255:15 257:18	235:20,21	106:4 119:19
40:14 49:10,14	257:20 266:9,9	disclosure 38:1	169:5
64:13 98:18,25	287:21,23	124:23 125:1,2	discussion 25:4
99:4 120:2	291:18	125:9,10	33:21 35:19
121:7 176:24	differently	240:20 278:16	71:12 124:11
231:4 240:14	64:15 97:23	281:20	141:25 142:25
241:23 242:1	135:13,14	disclosures	143:8 146:4
243:6,10	202:17 286:7	275:11 278:8,9	204:2 223:22
255:16 274:14	digital 16:22	279:1 280:4	223:23 224:20
differences	diminished	281:24	224:23
64:14 168:24	86:14,18 87:1	discontinued	discussions
different 15:21	direction	198:16	31:15 39:14
18:1 20:25	294:10	discontinuing	123:24 147:21
42:6,6 47:19	directly 152:14	197:5	147:22,25
48:1,1 52:11	224:20	discount	223:8 225:22
52:24 54:10,12	director 6:15	161:17,19	disgorge
62:15,16 65:15	disabled	164:2 166:19	156:24 194:6
67:15 73:19	150:24 157:17	discounted	disgorged
97:10 99:14	202:6,8 203:1	180:2	130:3 156:7
101:1 102:8	203:3,13,18,20	discover 20:19	157:21,23
110:3 113:16	disagree 170:7	discuss 17:9	194:9
113:23,24,24	227:10,13	26:19 27:17	disgorgement
116:6 132:23	230:23 231:2	39:8 74:9 88:9	97:13 130:15
132:25 133:2	disagreeing	165:14 166:5	158:12 189:23
133:13 136:20	196:10	166:12,17	190:4 194:14
139:24 163:10	disappear	222:8 282:4	disgorging
163:13 167:17	216:2	discussed 23:5	118:23
182:2,14 183:6	disclaimed	24:5,17 25:5	display 85:17
195:14 196:24	147:7	25:18 67:4	85:22 86:2,9
213:2 219:2	disclose 149:15	85:15 87:2	111:5 112:12
225:14 232:3,8	245:18	230:17	116:16 137:23
233:21,24	disclosed 101:3	discusses 24:24	138:4 140:3,4
238:17 240:8	149:14,23	39:16,22	142:18 143:14

[display - eduardo]

143:21 144:18	210:15 223:4	download	130:5 174:21
145:4 172:18	224:3,15,17	236:2 241:2	176:17,18
174:22 178:5	225:23 226:22	245:17	230:17 253:21
200:22,23	226:24	downloaded	254:12 261:3
201:4,5,6,9	documentation	236:24 246:17	265:12 270:7
205:15,20	223:7	downward	270:23 271:5
206:12,16,20	documents	81:24 253:15	273:1 282:17
209:14 210:5	26:9 33:20,22	dr 230:23	285:24 286:16
210:12,22	34:1,8,10,16,17	231:3	288:2
211:6 228:25	34:20,21 35:14	draw 16:24	earn 85:18
229:4	40:7 73:6,9,10	drive 195:24	100:16
displays 207:6	73:12 75:10,14	249:25 250:6	earned 88:4
dispute 170:3	75:15,19,22	250:15,17	89:10 96:4
disputing 94:14	76:1,8 77:24	256:8,9,22	99:5,7 100:8
distinct 176:23	122:10,15	257:22,23	127:4 129:4,10
distinction	164:24 166:6	driving 196:2	130:2 276:19
203:17 248:16	166:16,22	drop 120:3,11	276:20 277:1
distinguished	167:3,7,15	127:5 198:14	earning 127:19
176:18	168:5,8 178:13	drops 86:9	earns 120:12
distress 231:10	184:7 206:11	drove 199:2	ears 199:22
231:20 232:3,5	223:10 224:13	256:24	easier 163:19
distribution	226:8,13,16,19	due 199:18	237:13
169:11,22	doing 42:16	duty 147:6	economic 40:2
district 1:1,2	48:21 134:7	dv3 228:1,3	40:15,24 74:21
2:1,2 9:17,17	140:22 141:13	dynamics 36:8	74:23 199:13
document	199:13,16,16	38:19,24 39:8	199:16 231:3,4
74:19 75:11	203:18,20	39:17,25 40:8	231:6,24,25
76:4 122:17	214:2	40:23 249:10	234:10 236:18
123:18,25	dollars 251:2	e	240:14 242:11
124:3 141:24	254:11 257:14	e 5:5 7:1,10 8:1	243:7,10
162:4,6,11,12	double 176:11	295:9,12 296:1	economically
170:2,17,18,19	doubt 192:10	297:3,3,3	241:7
171:17 184:8	235:9 265:13	earlier 29:5	edited 73:1,2
191:15,19	265:15	47:14 70:11	eduardo 5:5
199:7 205:3,17		111:16 121:16	10:12 35:20

[eduardo - example]

53:14 88:23 295:1 effect 135:19 136:6 171:7 effectively 97:12 effectiveness 181:25 efficient 122:14 eight 292:8 either 74:7,24 84:5 193:21 217:19 220:8 222:7 268:4 elaborate 79:9 151:20 element 127:20 eliminate 176:4 eliminates 191:14 emails 122:18 122:19,21 embodied 19:1 19:6 embodies 25:9 emotional 231:10,20 232:3,5 employee 294:17 enable 148:14 enabled 153:17 154:10 156:23 encompassed 19:6	ended 291:5 ends 145:1 291:21 energy 173:15 engage 104:7 140:17 261:25 engagement 13:22 14:2 30:23 48:19 engagements 12:21 15:17 engaging 32:10 114:12 engineering 26:13,19 enrichment 17:10 20:9 41:17 74:12 79:20 80:6,10 80:22 81:12 83:9 87:9 94:25 95:7,23 96:17,25 97:12 99:23 103:22 107:22 109:8 110:15 111:23 114:23 120:10 129:1 151:4 271:1 273:3,13 273:20 276:18 ensure 81:25 enter 244:6 249:20 entered 46:2 235:16 245:24	entire 126:1 127:9 227:5 entirety 191:7 entity 43:9 45:21 244:7,7 equal 69:10 120:9,18 equation 241:10 equivalent 91:3 91:4,5,8 137:22 errata 295:14 295:16 296:3,5 erroneous 160:1,5 162:12 erroneously 152:3 errors 159:25 esantacana 5:12 295:2 essence 52:16 essentially 51:24 90:21 95:8 estimate 12:13 13:23 14:8 56:4,17 123:18 149:12 228:25 estimates 75:6 159:17 estimating 162:9 et 1:4 2:4 9:15 106:10,10	165:25,25 166:1 179:1 295:4 297:1 evaluate 195:22 290:3 evaluating 202:5 event 177:3,10 231:5 evidence 271:24 exact 62:21 101:24 105:15 127:4 129:16 243:19 244:8 exactly 23:11 126:24 examination 7:2 12:5 270:1 276:7 examined 12:2 77:5 example 26:12 32:17 41:21 61:7 64:9 65:2 74:17 90:16 93:19 100:22 101:14,20 102:1 108:5 109:2 119:9 121:10 126:14 126:16 130:18 133:16 152:17 152:19 153:23 184:3 193:4
---	--	--	---

[example - factors]

209:17 214:5	executed 293:7	42:23 43:4,14	96:20 163:13
232:16 235:3	executive 6:11	43:22,24,25	178:16 223:15
235:14 239:4	exercise 246:20	44:2,4 48:18	224:11,14
240:22 242:9	exercises	73:21 114:8	226:14 233:3
examples 18:10	213:21	133:4 147:8	252:2
53:3,23 126:14	exhibit 7:13,17	149:22 162:7	extremely 63:4
excel 7:17	7:20 8:4 16:19	194:19 278:1	63:4
139:21,22	16:22 140:9,10	279:7,13,17,20	eyes 1:12 292:3
140:1,2,7	141:23 163:20	279:22,23	f
143:3	171:24 172:4	280:7,12,12	
except 121:5	174:9,12	284:11,21	face 145:12
287:13	175:25 180:20	experts 31:15	facebook
exception	exist 251:1,7	272:20	136:22
155:9 169:2	260:14 272:24	explain 75:24	fact 66:1 67:7
218:11	exists 251:9	86:20 168:1	70:7 75:4
exchange 33:10	expect 253:10	205:10	87:17 94:9
235:18,22	253:11 261:24	explained	96:18 99:18
236:16 237:2	expectation	122:8 126:24	138:11 159:12
239:23 243:22	241:13	explains 18:12	159:22 164:15
246:1 247:2	expectations	explanation	164:24 190:11
251:2 263:23	163:1	168:3	209:9 212:8
265:20 267:7	expects 111:17	explanatory	215:6,11
267:20 282:9	experienced	182:16	216:16 219:7
exclude 84:14	286:10	exposed 63:5,8	260:3 286:8
155:18,21	expert 7:13	63:11	291:4,6,20,20
158:9 276:2	12:21 14:1	express 26:2	factor 69:25
excluded 128:6	15:13 17:18	expressed 33:3	70:18,24
128:12,16,20	18:5,25 19:5	48:18	165:14,24
152:6	19:10 20:18	expressing	167:21 257:1
excluding 88:7	21:2 30:9,10	147:8	258:9,16,16
88:7	30:13,15,19,20	extension	factors 59:17
excuse 63:4	30:23 32:3,4	289:20	118:7 167:9
80:7 99:1	33:12 38:1	extent 18:21	217:3 249:25
218:3	39:16,24 40:3	40:6 44:16	256:3 257:21
	40:9,10,15,18	76:1 80:18	257:22 258:4
			263:17

[facts - firebase]

facts	181:7 237:6	273:19 285:15 285:19,20 286:11	feeds	155:3	
failed	149:15	false	45:13 46:6 46:8 79:9	file	143:5
fair	18:24 21:1 33:6 42:10,17 42:17,17 47:16 47:17,18,19,21 47:25 48:6,11 48:14,19,23 49:12,16 50:7 50:21,21,22 63:1,24,24 64:1 68:2 104:3 112:24 123:6 127:13 129:12 135:22 141:15 151:2 159:23 163:10 167:7,15 168:10,18,22 202:15,23 203:5 211:16 213:3 222:15 226:18,21 227:1 233:11 233:11,19,21 233:22,23,24 234:5,9 235:2 235:6,15 238:10,14 239:15,16 243:3 247:3 248:15 254:21 257:25 266:2,2 267:17 272:3	277:10 98:19,21 99:5,8 familiar 31:10 98:16 184:12 familiarity 30:16,20 31:17 98:22 far 27:14 38:8 76:5 106:14 108:25 194:17 198:8 234:1 237:19 238:3 272:23,23 farr 2:15 5:4 6:13 10:13 fashion 29:20 29:21 32:8,8 faster 106:9 fathom 249:19 favor 70:1,19 favorable 19:23 feasibility 17:6 feasible 105:12 108:19 features 245:8 february 7:14 federal 294:13 296:1,8,9 fee 66:11 275:24 276:2	222:21 286:19 223:14 78:1 229:21,23 50:15 field 40:11,18 41:2 figure 85:1,9 85:14,21 87:11 88:2 89:22 90:16,17,25,25 91:2,4,5,8,9,20 92:6,7 93:1,7 93:12 137:21 138:20 139:6,6 139:8,16,18 140:5,7,16 144:12,14 158:6,20 159:1 167:9,19 169:4 171:8 175:3 203:11 204:17 204:21,21 205:1,2 210:3 210:10 211:16 227:21,22 248:25 251:13 290:6 figures 93:2,2 93:20,21 155:18 174:14	feel	45:13 46:6 46:8 79:9
				final	172:16 179:8
				finalized	22:6,9 36:3
				finalizing	22:3 39:10
				finance	177:22
				financial	24:15 25:14,23,24 74:10 75:17,17 77:5 86:13,17 95:9
				financially	10:2 294:16
				financials	93:24
				find	97:19 105:22 123:25 138:17
				fine	35:25 44:23 46:6 161:1
				finish	50:10 69:4 146:20
					196:22 197:24 261:13
				finished	53:17
				fire	249:6,13
				firebase	180:5 183:3 197:2 209:1 234:17 235:4,13 270:16,21

[firebase - full]

274:3	flowed 223:16 223:17 224:17	foregoing 293:3 294:4,6 294:10,12	found 73:24,25 74:2,3,7 130:19 131:17
firm 9:25 14:5 14:6,7,23 15:4 16:9,11 113:24	flowing 207:4	forget 34:4	163:5
firms 15:22	flown 223:16 223:16	form 12:15 19:25 42:11	foundation 108:16 111:8
first 22:5 37:17 65:18 75:20 77:2,3 83:23 88:18 89:22 91:3 102:14 105:18 122:10 122:11,12,22 138:25 143:11 145:25 197:12 205:22 244:6 283:15	focanti 6:6 focus 95:11 189:23	52:20 55:7 56:8 65:23	113:19 115:3 125:7 126:10
fits 66:5	focused 27:2 186:9,11,13 241:15	66:23 75:16 99:10 100:2 136:11 137:7	131:19 133:24 194:3 197:15
five 22:16,18 283:6	focusing 139:2	150:1 163:11	four 196:13 237:6
flat 264:15	fodouop 5:20 10:18,18,22,22	164:4 167:8,16 188:11 200:18	fraction 206:3 228:10
flexner 3:4 10:15	folks 67:6	210:25 212:2	francisco 1:14 2:17 3:17 5:10 9:1,20
flip 149:2 230:12	follow 197:7 221:1	238:18 247:12 250:3 256:10	franklin 4:8
flipped 149:1	following 131:1 131:21 132:2	260:8 266:24 278:17	fraud 98:8,14
floor 2:16 3:16 4:9 5:9 9:20 52:4,10 53:8 54:8 55:1,2,2,6 55:13,15 70:14 266:2,4	145:4 169:14 169:24 170:1 199:15 217:18	formed 48:13 66:20 67:18	frawley 148:7,8
florida 3:9 4:10	217:23,25 221:22 236:13	formerly 215:25	frcp 296:1
flow 223:20 224:20 225:3	236:22 238:12 273:13 276:17	forms 232:11	free 79:9 222:21 243:2 243:14 244:12
	follows 12:3 295:8	formulating 74:11	244:15,17 245:7
	footnote 24:20 25:5,7,9 139:5	forth 94:7 294:5	fresh 173:23
	165:18 166:4	forthepeople... 4:12,13	front 2:16 5:8 9:20 26:10
	227:19	forward 92:19	275:24 276:2
	footnotes 167:19	145:2 182:21 214:23 215:7 216:4	fulcrum 52:1 52:11
			full 50:18 178:21

[fully - goes]

fully 26:17 40:9 149:14	gains 217:8 gallagher 2:16 5:4 6:13 10:13	196:17 198:4 199:22,22 239:17 240:9	45:13 48:7 57:3 61:21 63:13 64:8
function 49:23 135:21 230:18	game 198:5 gap 77:6,11,11 77:14,14,18,21	240:20 242:17 248:17 278:25 ghose 6:7 19:15	72:9 92:6,10 98:17 108:13 113:23 114:1
fundamentalist 265:5,16,19	77:21,25 78:17 78:25 79:6,9 79:23,23 85:16	21:4 give 11:7 42:1 63:18 66:25	115:4 116:16 117:5,13,16 121:20 134:1
fundamentali... 264:14	86:1,2,9 89:7 122:16,20 139:9,15 170:6	67:19 90:15 106:9 172:8 180:23 187:24	142:13,15 143:6,10,19 144:1 145:13
further 45:14 148:17 157:14 276:6,7 294:12 294:16	248:14 gap's 79:23 garnered 217:2	197:21 231:18 236:16 242:25 245:7 246:1	146:18,19,20 152:19 153:23 156:10 158:25
future 72:9 216:7	gate 245:9 gathered 29:6 gears 161:9	249:12 251:20 266:16 given 41:8,9	168:8 196:12 197:16 199:25 214:18 233:2
g	176:15 general 225:20 generally 29:4	51:21 57:17 118:13 137:9 156:18 162:24	237:17 242:18 242:19 244:16 252:20 260:25
ga 274:2 ga4f 180:13 181:22 182:5 182:10 183:22 184:4 185:13 185:15 186:7,9 187:15 192:7 193:6 198:5,7 198:11,15,16 204:1,10 212:13,19,25 213:10,12,19 213:22 215:6 215:12 216:1 217:14 219:14 220:21 221:21	36:7,18 94:25 100:5,5 273:9 generate 85:17 86:1 89:9 190:14,15 192:21 generated 79:3	192:13 238:15 275:10 278:15 280:3 292:7 294:11 gives 247:2 254:16 giving 231:21	263:13 267:23 280:10 281:23 289:1,14 290:18 291:10 goal 47:15 140:15,22 168:11
gained 98:18 98:20 99:1,25 273:5	183:13 236:14 generates 181:9 generic 241:21 getting 29:25	233:10 235:18 235:22 236:23 236:25 247:10 gma 186:7 go 9:11 15:20	5:21 10:19,23 13:10 15:23 16:5 goes 18:13,20 52:2,12 119:7 119:8 152:17

[goes - google]

153:9 216:5	goodbye 198:7	111:20 112:7	158:17 160:17
267:15	goog 7:18	112:15 113:1,2	172:17 174:22
going 9:5 43:19	google 1:7 2:7	113:2,13,14	176:18,19
44:20 50:10	7:20 8:4 9:16	114:1,1 115:7	177:2,5,9,23
58:13 65:10	10:13 21:3	115:11 116:3	178:1,3 180:5
71:14 92:18	29:6,8 34:21	116:21 117:12	181:8,20 182:1
99:13 103:6	50:13 54:3,5	117:18,20	183:2,13 184:8
112:23 116:15	54:15,17 57:22	119:6,13,21	184:15,17,25
116:22 121:11	58:1 61:2 62:1	120:3,5,16	184:25 185:1,7
121:18 124:5,8	62:2 65:6 66:3	121:4,23,25	185:9,11,23
126:25 133:17	68:1,21 71:9	123:8 124:18	186:18,23,24
162:17 163:18	72:6,8,16,17,18	125:2,14,24	187:5,9,11,12
164:13,14	73:15,22 74:22	127:4,19 128:1	187:12,13,14
173:16 175:17	75:5,7 77:5	128:5 129:14	187:16,22
199:20 206:2,4	78:2 79:17	129:16,18	188:3,9,10,18
208:8 214:20	82:12,16,20	132:14 133:17	188:20 189:8
214:22 215:5,7	83:10,11 85:16	133:19 134:13	189:17,25
215:9 216:4	87:12,25 88:4	134:18 135:25	190:5,17,21
234:10 242:15	89:9 94:5,12	136:15,22	191:12,24
246:10 250:1,7	94:12,12 95:23	137:3,5,9,12	192:5,20 193:9
250:14 251:19	96:4,7 97:17	139:13,25	195:23 196:25
251:21 252:1	98:1 99:1,4,7	146:11,15,22	197:1,17 198:3
264:4 266:25	99:19,25 100:8	146:23 147:9	198:16,22
267:10,19	100:13,18	147:14,17	199:13,15
284:19 287:15	101:2,7,15,16	148:14,22	201:6,9 202:1
288:14,15	101:17,21	149:14,20,23	202:6,21 203:3
289:2,7,7,9	102:2,9,13,23	150:9,15,21,24	204:5 207:6,17
golf 104:21	103:25 104:6	151:12,22	207:21 208:14
106:18 107:17	104:19,21	152:2,2,4	208:15,18
108:6	106:7,13,17,18	153:2,8,10	209:14 210:5
good 12:7	106:20 107:3	154:8,10,11	210:12,23,24
103:19 116:21	107:17 108:6	156:13,16,17	211:6,7,9,13,18
120:20 246:7	109:3,4,18,25	156:21 157:15	212:22,23
264:9 270:3	110:16,24	157:16,17,18	213:9,17 214:6
	111:5,13,17,18	157:24 158:14	214:23 215:1,5

[google - hard]

215:16 216:16	280:19,21,24	gotten 135:12	h
217:5,10,13	281:8,14,18	188:22,22	h 6:11 7:10 8:1
218:3,4,6,15,17	283:17 284:9	193:14 216:17	297:3
218:20 219:14	284:14 285:1,3	216:18 217:3,7	half 79:15 86:2
220:20 221:7,9	285:12 295:4	286:15,18	hand 11:3
221:20 234:16	297:1	287:2	40:17,17
234:21 235:4	google's 19:11	governed 44:17	220:13
235:13 236:9	28:6 72:7	44:22	handled 13:17
236:11 237:21	82:19 86:8	governs 45:2	295:8
238:1,7 239:4	87:9 95:6,8	great 18:12	happen 37:6
239:6,8,13	96:12 106:6	142:7	111:3 123:15
240:6,16,17	111:5 114:13	greater 68:6	124:1 136:24
241:9,11,22,25	116:14,16	253:15	156:21,22
242:8 246:25	119:1,2 120:11	gross 67:11	186:6 198:17
247:3,8,15	121:13 135:21	92:11,12	198:20 202:6
248:2,16,24	137:22 139:14	grossly 56:11	202:12 214:8
249:4,6 250:7	141:7,9 147:2	64:19 67:12	214:12 215:1
250:14 251:3	148:10 152:15	group 6:6,14	215:11,25
251:10,18	154:11 168:13	14:18 48:15	216:8 221:2,5
252:1,22 253:1	171:8 180:16	54:10,11	250:20
253:2 254:1,16	180:21 185:3	groups 54:9	happened
254:25 255:17	186:5,6 192:14	guess 15:9	97:16 126:13
263:8,24	193:11 198:13	16:22 30:7	130:6 132:10
267:21 268:12	201:23 202:12	52:14,14 85:1	132:11,13
270:9,16,21	203:9,25 208:5	90:15 99:13	149:22 196:9
271:6,7,10,14	210:22 212:18	103:24 108:17	213:17 214:9
271:20 272:4	213:4 215:1	111:2,9 173:18	216:10 235:7
272:14 273:5	217:1 247:10	182:15 195:6	250:20 274:1
273:14 274:14	250:1 252:5	196:11 229:11	happening
274:15,23,24	263:17 271:13	243:5 245:20	245:16
275:4,6,8,19,23	272:20 273:2	248:12,14	happens 133:5
276:19,20	273:21,25	249:11,23	195:10 244:9
277:1,9,18,22	275:10,18	guys 97:9	happy 227:5
277:24 278:4	280:3		hard 35:23
278:15 280:1			73:7 142:1

[harmful - hypothetical]

harmful 231:5	66:7 67:5	225:16,19,22	266:16
harris 5:6	69:10 206:14	226:1,25	hr 26:16,21
head 87:6,6 171:23	228:9 249:1,2 259:12 260:3	227:16 247:19 277:13	hsiao 3:13 huh 85:8,11 156:19 181:1 227:23 236:21 288:5
heading 205:19	261:10,14	hochman's	human 34:13
hear 31:2 35:23 195:17 219:22	highly 159:9 161:1	21:5 22:2 23:23 214:14	hundred 257:13
heard 31:19,20	hire 278:4	214:17,18	hundreds 245:23 246:11
heat 124:9 229:22	hired 275:8 280:1,19 281:8 281:14	hoffman 21:16 21:17,19	hynes 5:22 9:22
heavy 169:12 169:19,23 170:5	hiring 278:21 historical 212:9 212:17 213:14 263:18	hold 18:17,17 40:10,21 51:5 53:11 60:17	hypotheses 122:20,24 123:9,15,20
heinz 6:7	62:11,16,21	69:2 95:2	hypothesize 129:13 134:10 134:14 249:25
held 155:14	63:17 71:8 141:18	105:24 115:1	hypothesizing 60:11 234:12 253:6 254:18
help 38:22 140:21 178:4 208:9	history 72:19 hit 58:1 62:1,7 62:11,16,21	133:23 261:13 263:5,12	hypothetical 42:3,10,13,19
helped 36:15 38:10 179:18 212:16	63:17 71:8 141:18	holding 40:18 229:20	98:7 107:2
helpful 88:1 89:18 155:4 176:14 243:4	hitting 57:22 hmateen 5:13	honer 158:15	108:16 109:15
helping 37:18	hochman 21:18 23:22 25:3,20	honestly 20:14	115:2 125:6
hereto 16:20 140:11 163:21 174:10	26:21 27:10,18 28:23,24,25 29:3 30:8 33:13,21 35:16	honored 243:9 hope 237:4 hot 124:7,8 196:17	126:9 131:1,21
hey 114:15 198:3 242:25	36:1 39:9 147:21 148:2,9	hour 23:8 65:10 103:6	133:25 156:12
hidden 235:20	149:25 214:5	hourly 15:2	157:2 158:21
high 122:7	215:15 222:9	hours 13:21	159:11 160:15
higher 14:24 52:6 53:13 55:10 56:1,7	222:15,24 223:5,8,12,23 224:1 225:7,9	14:8,14,15 22:13,16,18 23:14 73:4,11 158:5 160:7	164:9 194:3 196:4 197:12 216:3 219:8 221:2,23

[hypothetical - incognito]

238:22 239:12 239:24 240:5 240:11 242:23 247:8 248:15 249:19 250:17 251:24 254:21 255:19 272:13 281:22,22 282:2,4 hypotheticals 147:13 250:23	imagine 14:14 52:16 198:2 237:20 243:1 271:13 imagined 60:10 imaging 42:19 243:4 imaginig 42:9 60:8 immediately 197:9 impact 74:17 74:18,18,23 76:22,23 77:4 77:5,23 78:5 78:13,15 79:7 81:22,22 85:15 85:25 86:7,14 86:18 87:2 124:22 137:25 138:5 139:9,10 139:14 145:18 169:5,15,25 191:15 199:6 201:12 205:14 205:15,19 206:20,23 207:2,5,6 215:10 252:5 258:10 273:21 impacted 206:4 206:8 207:9 impacts 80:14 122:11,12,22 122:23	implied 263:24 imply 262:19 importance 78:2 important 119:10 195:1,1 215:7 254:5 265:2 impossible 135:25 190:7 190:10 202:13 281:22 impression 116:9 209:20 211:5 impressions 82:17 116:18 172:13 176:1 189:23 improper 108:15 109:15 115:2 125:6 126:8 133:24 194:2 197:11 inability 83:4,5 84:19 inadvertently 288:23 inappropriate 80:19 inappropriately 188:22 incent 68:5 250:9	incentive 67:19 incentivization 66:24 incentivize 48:15 49:24 63:18 67:5 230:18 231:13 241:17 250:10 258:3 260:4,5 262:5,16 264:25 incentivized 262:9 incentivizing 64:19 67:6 include 14:8 17:9 33:25 36:19 109:2 176:9 209:20 209:22 included 37:1 46:19 90:16,17 161:1,2 211:11 295:14 296:3 includes 17:5 176:1,9 209:17 including 15:20 17:8 72:17 76:22 84:13 106:8 181:11 184:7 257:11 257:12,12,13 257:17 incognito 201:13,24
i.e. 77:6,10 identification 16:19 140:10 163:20 174:9 identified 50:11 158:16 223:18 identifier 150:22 identify 26:10 76:21 137:21 140:23 222:24 241:17 identifying 17:6 140:16 142:8 identity 156:9 232:17 illegal 215:19 215:24 illustrative 102:2			

[incognito - intended]

202:7,9,13,20 206:9 income 95:8 incomplete 121:24 158:21 194:3 196:4 197:12 251:23 272:13 281:21 increase 50:16 271:25 increasing 271:20 incremental 23:2,24 24:9 24:12,19,24 25:4,19 26:3,6 27:4,13,19 28:8,12 independent 20:6,18 284:6 indicate 77:25 164:16 170:19 178:13 214:1 254:4 indicated 28:7 54:17 68:2 139:5 233:14 238:6 indicates 85:15 169:12,23 215:4 indicating 88:23 244:11 indication 238:14	indicators 50:12 individual 49:24 231:13 241:18 246:16 individuals 50:14,15 industry 36:8 37:13 39:9 40:8 infeasible 103:25 107:17 influence 35:6 inform 177:6 information 29:6 31:20 35:11 40:4,16 51:18,21 54:4 56:3,15 57:4 57:14 58:6 59:2,4,16,20 60:2 61:15 63:19 64:24 67:4 71:7 72:15 75:2,3 78:24 93:18 94:1 106:8 118:12 119:2,3 119:15 122:2,4 127:22 129:20 134:21,22 135:9,11 140:4 147:5 148:14 159:16 162:13 162:24 163:7	165:6 175:21 177:5 179:10 179:11,14,17 181:15 182:23 183:4,16 187:14 188:21 192:20,24 193:2 200:24 201:1,22 203:24 204:5 204:11 207:17 208:5,25 212:22,24 215:3 216:17 216:18 221:9 226:7 229:9 231:22 238:23 239:3,5,8,10 242:3 246:13 248:4 252:11 254:12 255:9 255:10 259:9 261:2 265:3 277:14 278:21 278:22 279:2 280:17,17 285:23,25 informed 94:13 201:25 225:6 225:16 226:19 230:24 277:12 infrastructure 26:14,20 28:6 28:7,9	infringe 195:10 infringed 131:17 infringement 36:14,22,24 38:9,21 42:21 130:19 194:14 infringer 132:17 133:12 infringes 195:3 195:14 infringing 132:18 133:6 133:11 194:15 194:21 195:4 initial 57:23 169:12,23 initiated 151:5 input 109:12 137:9 inputs 75:10 inquiry 93:23 inside 139:22 279:15 install 236:3 237:24 installing 257:14 integrate 136:20 188:9 intellectual 14:18 intended 139:13 249:21
---	--	--	--

[intention - knittel's]

intention 19:5	involving 108:7	irrelevant	john 4:6
interact 168:21	ios 145:18	193:1	join 253:1
interaction 181:22	146:2,5,12,24	irs 37:14	joseph 4:5
interested 10:2 75:14 214:21 294:17	147:17,18 148:11,11 150:8,10,16 151:24 155:18	ish 266:17	juice 98:8,8
intern 10:16	155:21,23,24	isolate 183:13	july 294:21 295:3
internet 31:1,4 157:10 168:21 170:22	156:7,16,21,23 156:23 157:8 157:17,25	isolated 275:25	june 1:15 2:18 9:1,6
interrogatories 7:23 8:7	158:9,16 159:2 159:17	isolates 41:15	jyanchunis 4:13
interrogatory 162:2 163:7,16 180:16 181:5	ios14.5. 146:6	issue 44:25	k
intimidate 268:22	ip 6:4 130:9	47:17 48:11	keegan's 21:22
introduce 10:17	ipsos 54:5 57:7	50:7 73:25	keep 49:25
intrusion 285:17 286:10	60:3,7,13	104:20 109:10	145:11 172:24
intuition 229:11	64:10,14,25	157:8 265:20	193:12 230:20
invaded 73:15	65:5,12,21	266:20 267:8	231:14 241:19
inverse 88:24	66:16 67:17,21	267:20	244:11 289:7,9
investigate 49:18	68:14,19,21	issued 13:15	keeping 27:5,9
investigated 49:19 185:25	69:19 70:1,4,6	38:5 41:5	27:16 35:21
invited 271:13	70:12,22,25	42:23 43:3,14	127:24 128:4
involve 25:4	246:8 252:14	43:22,25	283:15
involved 98:5 133:10	252:18,22	216:11	keeps 193:9
	253:14,20,22	issues 99:11	kevin 5:20
	254:6,9,16,25	107:13	10:18,22
	256:14,17	items 77:15	kind 43:15,22
	259:3,6,12,14	j 1:13 2:14 7:3	131:2 170:23
	259:23 264:4,5	7:13 12:1	189:9 245:15
	265:3 275:16	181:14 293:1	knew 59:10,12
	275:19,23	293:12 295:5	171:14 271:7
	285:9 287:17	297:2	knittel 6:9
	288:10 290:2	james 3:5 10:14	19:14 21:4
	290:21 291:14	58:15,24 270:4	163:24 230:24
		jlee 3:11	230:24 231:3
		job 1:24 87:7,8	knittel's 39:16
		87:10 89:21	145:7,14
		135:10 149:18	
		194:19 295:5	

[knittel's - leaks]

146:22 147:23	162:4 164:12	283:18,19,23	195:24
know 12:14	164:13,15,22	283:23 288:17	laptops 195:15
15:6 18:12,21	165:3 166:14	289:2 291:11	large 251:6
20:22 22:13	166:14,21	291:12	larger 194:16
30:12 31:22	171:5,10 172:6	knowing	lasinski 1:13
42:12 44:14	178:15 183:23	157:17 238:23	2:14 7:3,14
45:1,1 53:5,15	185:19 187:13	238:24 241:11	9:14 12:1,7
54:12 56:18,20	188:12,13	knowingly	53:16 71:19,21
58:10 59:2,3	189:20,20	49:25 230:19	110:12 144:9
59:15,25,25	192:2,25 195:6	231:14 241:18	174:7 200:8
60:1 64:18	196:2,7,14	known 146:12	230:6,8 269:21
66:22 67:16,20	198:19,19	146:14,15	270:3 276:5,9
68:25 69:6	199:2,23	147:17 148:20	288:22 289:3
71:4,5,6,8	202:16 204:3,3	knows 121:11	292:7 293:1,12
76:13 85:6	208:19 210:2,9	156:16 157:15	295:5 297:2
88:23 90:4	213:11 217:22	160:17	latitude 254:17
92:14 93:2	217:23 219:7	kochava 184:9	law 3:6,14 4:7
101:16,17	220:15 221:1,4	184:13	4:17 5:7 15:21
102:4,19 103:5	222:23 223:1	kuate 5:20	lawyer 13:2,3
103:6 107:24	223:21 224:19	10:18,18,22,22	132:21 148:3
109:13 116:22	224:21,21	I	271:13 273:2
117:7 121:13	227:4 231:17	I 1:21 2:19 6:15	273:25 282:17
121:13,23	231:19 235:6	294:1,24	lawyers 13:7,9
122:5 123:2,9	240:22 242:12	label 98:9	13:10,11,14,18
123:11,13	245:5 252:9,10	lack 108:16	15:13 19:23
124:1 125:10	254:23 255:21	111:7 113:18	23:16 275:18
132:20 134:24	256:2,11	115:3 125:7	lay 280:8
138:9 141:24	258:22 260:10	126:9 131:19	layman's
146:23,24	262:2,14,25	133:24 194:3	134:19
147:4 148:1	263:25 264:1,3	197:14	layperson's
151:23 152:2,4	264:8,12,17	language	146:3
153:2 156:13	265:5,10,23	189:18 241:15	lead 14:18
157:11,24	266:11 277:4,9	laptop 130:19	171:17
158:23 159:24	278:25 281:3,5	130:21 131:6	leaks 232:21
160:6,6 162:4	281:6,25	131:12,15	

[learn - limited]

learn 34:3	105:24 106:23	237:14,18	legs 173:15
learned 226:4	107:6 108:9,15	238:18 247:12	level 40:9 72:19
227:2	108:23 109:14	250:3 251:23	84:25 148:13
learning 29:8	111:7 113:18	252:8 256:10	189:21 255:8
119:4 126:6	115:1,16 117:4	258:13 259:20	lexecon 6:12
leave 147:13	124:7 125:1,5	260:8,24 261:8	liability 73:24
213:11	126:8 131:19	261:13 262:1	73:25 74:2,3,6
leaving 286:6	131:24 133:21	262:11 263:2,5	132:10 134:25
lee 3:5 7:6	133:23 136:11	263:12 265:9	135:1,2 278:1
10:14,14 12:15	137:7 138:7,24	265:21 266:10	liable 277:24
13:1,2 17:20	139:2 141:18	266:13,18,24	liberty 45:18
18:17 19:25	141:22 142:1	267:9,22,24	license 36:15
23:19,22 25:6	143:4 144:3	268:4,15,22	38:22
27:20,22 28:12	145:8,11 150:1	269:15 270:2,4	licensing 37:1
28:14,22,23	151:17 152:22	272:9,14	38:11,15 40:25
35:20,23 37:16	158:21 160:12	274:22 275:15	41:4,9,14
37:19 39:11	163:11 164:4	276:5 278:8,17	life 243:7 251:3
42:11 44:12,16	164:20 172:2,5	280:9 281:11	light 249:13
44:23,25 45:23	172:8 173:14	281:21 282:4,7	278:6 281:20
46:1 49:4 50:9	173:22,25	284:17 286:12	281:24
51:5 52:20	180:23,25	286:21 287:4	lights 249:6
53:11,14 55:7	181:2 184:21	287:15 288:14	likely 52:6
56:8 57:2	185:14 188:11	288:19 289:8	53:12 62:12
58:12,16,21,25	192:17 193:3	289:14 290:17	63:5 121:19
60:9,17 61:19	193:22 194:2	291:9,25	158:3 159:2,9
61:21 63:12	196:4,16,19	lee's 217:25	161:1 169:13
64:7 65:10,13	197:11,14,24	282:2	169:14,24,25
65:16,23 66:19	199:20 200:18	left 110:14	170:5 263:15
69:2,4,11 70:3	210:25 212:2	200:10	lillian 6:4
79:11 84:9	217:17 218:8	legal 9:23,25	limit 179:18
85:9,12 86:5	219:18,22,25	99:11 132:25	limitation
88:15,22 89:1	220:2,5,9,12,23	133:2 275:12	157:7
97:6,9 99:10	221:15 222:19	279:3,22,23	limited 108:21
100:2,23	224:4,7 229:19	292:9 295:7	179:14 201:23
103:15,17	230:14 231:1		269:9

[limiting - made]

limiting 17:22 27:24 222:22	locked 295:12 296:1	203:24 217:7 229:6,6 245:15	256:16,21,24 261:12,15,20
limits 47:9 221:12 231:8	lodge 220:16	252:13,13	261:21
line 88:18 89:1 295:15 296:4 297:4,7,10,13 297:16,19	long 22:11,13 23:7 61:5 103:9	259:2 looking 24:17 25:16 73:12	lowering 70:1,6 70:20 117:17 128:25
linear 169:11 169:22	longer 82:23 218:6	79:20 83:22 84:8 85:1 88:2	lowest 261:17
listen 255:13	look 24:20 37:8 40:3,7,16	90:11 124:20 129:1,3 152:8	lunch 103:6,9 103:12 105:19 108:12 110:6
lists 142:16,18	49:20 53:8	158:12 167:18	m
litigation 6:4 34:20 35:14 36:13,21	54:8,8 59:16 78:11 86:25	185:4 204:16 204:20,22	machine 26:14 26:20 29:8 119:4 142:23 294:9
little 35:21 36:9 40:12 67:15 80:21 106:23 108:3 110:20 124:7 159:11 164:19 225:14 228:9 229:23 257:18 285:2	137:16 138:18 144:13 149:10 151:14 152:9,9 152:13,13 154:22 165:3,9 169:4 171:24 173:13 174:11 180:19 183:24	looks 41:14,17 55:3 92:1 199:14	macmenamin 6:11
live 104:18 134:20 196:1 197:20	203:23 204:8,8 204:23 206:13 208:23,25	loss 85:16 89:7 89:8	made 20:10 38:3 84:17,18 96:8 97:1 99:7 99:8 100:14,19 103:23 125:10
llc 1:7 2:7 9:16 295:4 297:1	214:18 227:21 233:16 245:11	lost 87:25 150:14 219:18	130:22 131:6 133:9 134:19 134:19,24
llc's 7:20 8:4	245:13 264:23	lot 18:13,20	159:17 168:23
llp 2:16 4:15 5:4,21 6:13	277:13 285:9 287:22 291:13	lots 116:6 130:9 195:13 284:25,25	169:1 179:8 181:23 190:9
location 9:19 106:8	looked 24:14 25:13 38:1	loud 10:21	190:21 198:22
locations 91:24	75:1,1 79:20 199:6 203:23	lower 68:13 69:7,9 115:13	213:9 218:19 224:3 247:22
		115:18 119:20 121:8 124:17	254:8 273:14 282:7 293:3
		125:24 126:4 128:15 249:7	294:8

[magic - mean]

magic 171:10	273:15 276:16	42:17,18 47:16	147:16 168:11
make 18:18	management	47:19,21,25	212:9,17
43:17,19 51:19	6:10	48:6,11,19,23	213:14 236:18
58:13 60:12	manager 82:15	49:12,16 50:7	240:15 242:11
74:5 78:19	84:24 91:3,4	50:21,22 54:3	263:17 267:13
82:8 83:2,23	91:11,17,19,22	64:21 67:3	269:10
83:25,25 87:24	91:24 92:1,12	134:12 159:20	matters 251:25
88:16 96:17,21	92:15,22,23,25	195:8 233:7,14	mcgee 4:5
96:22 105:20	93:18,24	233:19,20,21	mean 14:13
107:7,13	110:25 115:8	233:24 234:5,5	29:22 34:2
114:16 117:21	120:7 135:22	234:18 245:12	35:4 44:7
119:10 121:7	136:1 140:18	245:13,14,16	47:23 50:20
129:16 132:20	191:18 208:6	245:22 246:3	53:9,15,25
142:2 143:22	209:6	254:25 255:10	55:21 60:12
143:23 144:14	manager's	260:18 285:9,9	61:13 69:7
151:14 157:5	92:17 93:6,10	marks 71:13,17	73:7 76:13
159:11 163:19	managing 6:15	110:7,10 144:4	77:8 83:21
179:3,9 186:19	manner 55:20	144:7 174:2,5	94:20 101:17
199:8 208:2	manual 30:3	200:6 230:1,4	107:12 116:11
233:8 240:12	31:24 32:2,6,7	269:19	119:5 120:15
245:8 246:16	32:8,10,16	mateen 5:6	121:10 123:17
254:13 270:24	33:8,18	material	124:2 125:8
277:15,15	manually 30:4	168:24	132:2 134:2
287:12 295:14	30:5,5	materially	135:7,16 138:3
296:3	mao 3:13	168:20	138:14 154:6,7
makes 28:8	mark 3:13	math 84:4,4,4	154:22 156:5
111:13 120:5	16:18,23	mathematically	173:17 175:6
153:1 155:17	163:18	175:16	175:15 182:11
176:18,20	marked 16:19	matrix 143:7	182:12,17,24
186:19 191:18	140:10 163:20	143:11	193:23 194:23
252:3 263:24	174:9	matter 9:15	201:6 209:11
making 58:21	market 36:7	13:18 17:5	215:3,14,18
81:24 129:11	38:19,23 39:8	28:10 45:17	216:3 217:17
133:11 185:23	39:17,25 40:8	47:13 64:11	219:6 223:15
238:10 254:7	40:22 41:21	84:3 87:7,8	223:15 226:6

[mean - methodology]

228:6,8 229:21	186:23,25	191:23 200:16	member's
235:24 237:4	187:1,4,6,8	202:13 211:24	243:7
237:11 242:13	188:2,5,23	measurements	members 18:9
245:5 250:5	190:6,7,12,17	161:22 200:15	19:19 48:16
251:6 252:9	190:22 191:9	212:19	54:20 55:17,19
257:5 258:14	192:7,14	measures 17:7	58:1 70:21
260:1,11 262:7	195:22 203:14	164:16	232:17 235:3
262:13 265:22	213:10,18	measuring	261:23 262:5
268:23 280:11	214:8,11,12	86:17 98:10,17	262:17 264:25
287:6	215:16,23	163:9,13,14,15	284:25 285:2
meaning 28:6	217:1,13 218:7	183:25 214:23	memory 34:5
87:12 148:22	219:14 220:21	231:25	47:9 162:18
148:22 201:21	221:21,25	mechanics	290:9
254:1	231:3,9 232:12	127:15	mention 124:6
means 28:23	232:16,20	mechanism	mentioned
84:12,12 104:7	233:19 234:9	118:1 133:14	31:24 38:10
139:6 182:12	243:6 244:22	136:23 185:6	78:12 151:6
208:20,23	244:23 245:6	media 9:13	200:11 210:7
219:8 260:2	245:10,11	71:14,18 110:8	270:23
279:19	273:3,4,14	110:11 144:5,8	mentor 14:20
meant 54:2,2	274:13 276:19	174:3,6 200:7	meryn 14:7
90:15 94:15	276:24	230:2,5 269:20	mess 284:8
135:21 210:3	measured	292:8	message 114:15
210:10 266:1	81:13,14,14	meet 12:8	met 57:20
measure 81:10	118:18 180:4	member 62:20	method 95:23
83:8 96:3,3	210:23 211:7,9	63:16 66:25	95:24 210:13
99:22,24 100:7	211:12 215:10	67:19 70:13	methodical
100:8 101:5	245:4	230:19 258:3	53:16
124:22 125:11	measurement	262:8,20,25	methodologi...
126:4,18	118:23 157:21	282:11,13,14	213:21
129:16 139:13	157:22 158:11	282:15,24	methodologies
151:3 152:1	172:21 176:16	283:2,3,3	98:17
163:25 181:24	176:20 180:6	284:20 285:18	methodology
183:12,21	181:18 186:12	285:18 286:10	20:15 41:11
184:9 186:18	186:17 188:17		46:22,25 47:1

[methodology - month]

47:8 75:21 76:2,5 78:8 99:12 100:24 191:16 methods 18:11 210:6 metric 32:12 metrics 217:5,7 miami 3:9 michael 1:13 2:14 7:3,13 9:14 12:1 71:19 110:12 144:9 174:7 200:8 230:6 269:21 292:7 293:1,12 295:5 297:2 microphones 9:7 mid 123:21 mike 85:10 173:14 229:20 million 89:16 154:23,25 235:8 millions 245:24 246:11 mind 27:6,9,17 35:20 42:2 127:24 128:4 142:8 173:19 215:24 231:19 231:21 264:5 282:22	mindful 44:18 mine 212:23 282:7 minus 120:14 258:16,16 minute 147:15 157:12 176:16 minutes 173:16 266:17 283:6 mirror 290:15 291:8 mischaracteri... 25:6 52:21 70:3 100:3,24 185:14 211:1 212:3 224:7 250:4 261:8 263:6 278:18 mishear 176:21 misleading 99:25 273:5 misled 73:22 misread 258:19 misrepresent... 100:10,14,19 misrepresent... 273:15 276:19 missed 17:20 missing 59:7 172:25 misspoke 47:20 misstates 99:10 mistakes 20:10 misunderstan... 212:21	misunderstood 223:24 mit 6:10 mix 113:16 mmao 3:19 mobile 36:17 36:19 39:17 40:1 50:1 104:22 228:22 230:20 234:18 234:23 235:24 241:19 257:10 259:7 291:16 mode 201:14 201:24 202:7,9 202:13,20 206:9 model 74:17,18 76:22,23 77:4 78:5 81:23,25 85:15,25 86:7 87:3 90:3 94:16 111:19 120:10 122:5 122:14 134:14 137:25 138:6 139:10,13,21 139:21,22 140:1,2,6,7 144:19,23,25 149:12 151:9 169:5 263:6 models 74:21 122:6 145:5 273:14,20	276:18 moment 25:1 71:22 84:7 85:4 105:22 110:21 140:8 150:8 156:20 173:8 236:12 238:13 250:14 monetary 17:7 18:8 20:7 33:3 149:18,18 232:1 244:20 245:2 monetizing 82:14 money 54:6 67:22,25 68:21 70:12,20 111:4 111:13 116:4 118:3,5,9 119:20,24 120:3 124:17 124:18 127:19 130:2 185:23 187:24 239:23 241:2 246:12 249:16 254:20 255:3,4,4,5,18 271:19 273:14 275:6 276:19 276:20 277:1 montgomery 3:15 month 57:8 59:7,13,22
---	--	---	---

[month - nos]

60:24 61:12	named 148:24	229:19 250:9	137:12 280:24
64:11,18 66:8	233:13,16	253:17 254:13	281:18
66:18 68:19	native 7:17	255:13 262:20	nevertheless
70:8,15 71:1,7	natural 98:7,9	281:5	54:21
155:6,9 182:3	124:16	needed 18:4	new 4:19,19 6:7
260:20 289:13	nature 162:24	73:1 81:18	37:16
289:20	286:18	83:2 126:18	niall 6:11
monthly	near 214:22	286:5	nice 12:7
152:25 153:6	necessarily	needs 64:22	nike 116:14
153:14,18	61:24 115:18	102:20 185:1,1	117:2,10,11,11
154:2,9 161:20	118:2 119:19	194:7	133:16,18
163:5 165:25	123:19 149:8	negotiate 266:8	non 159:17
167:10	154:19 182:20	negotiating	228:3
months 61:8,24	212:5 250:6	66:3	nonattributable
155:13	272:4 277:23	negotiation	90:6
morgan 4:4,4	279:10	42:3,10,14,20	nongoogle
13:11,11 16:11	necessary	246:24 251:10	188:6,8,9
16:11	49:24 68:5	257:21 261:25	211:19
morning 12:7	159:22 224:15	neither 81:6	nonpersonal
mouthful 43:20	224:16 230:18	89:23 294:16	79:1
multiple 32:24	231:12 241:17	net 88:6 141:12	nonpersonali...
55:13 75:5	295:14 296:3	143:18,18,21	78:23 79:4
91:24 234:24	neck 199:21	161:18 168:16	81:18 82:1,3
287:20	need 49:18	network 111:5	82:22 83:1,4
multiplication	51:14 75:20	112:12 116:16	83:12,17 84:2
153:1	76:10,15 95:16	121:13 201:6,9	87:19,20,21,23
multiply 89:13	105:21 109:8	210:5,12,22	90:19,19
207:2	109:24 141:1	217:5	nontechnical
mute 9:9	158:17 159:10	networks	105:17
n	159:10,18	124:19	nonzero 63:22
n 4:8 7:1	160:7,11,23,23	nevada 1:22	normally 143:2
name 9:22 14:6	173:15 179:6,9	never 20:24	northern 1:2
69:25 70:18	208:2 216:4	31:19,22 43:2	2:2 9:17
270:4 294:20	219:22 220:7	62:7 90:4	nos 7:23
	220:15 222:19	92:19 122:24	

[notating - okay]

notating	261:20,21	212:2 218:9	office 295:11
295:15 296:4	262:21 280:22	220:16 221:15	oftentimes
note 9:7 169:6	287:9 288:12	224:4,7 237:19	242:14
169:10,21	291:6 292:8	238:18 247:12	oh 21:20,22
170:4	295:15 296:4	250:3 251:23	103:19 141:18
noted 10:10	numbers 75:21	256:10 260:8	147:4 155:2
292:10	83:19 92:25	263:2,5,6	216:16
notes 293:4	161:5 174:17	266:24 272:6	okay 12:14,18
noticing 10:9	193:10,12	278:17 281:21	13:4,14 15:1,8
null 162:20	205:18 212:10	286:12 287:4	16:1,7,13 17:1
number 7:11	229:10 260:14	289:6	17:14 22:2,19
8:2 57:16 61:8	nutshell 163:4	objections 7:21	24:8 25:11
62:21 69:6		8:5 10:4	27:11,16 28:11
71:5,5 83:24	o'	100:23 115:16	28:16 35:1,13
89:14 117:15	clock 103:5	117:4 126:8	35:18 37:6,25
121:3,3 128:10	oo 9:3 292:13	220:23	38:8 42:22
139:23 141:23	oath 12:2 294:7	obligated 20:21	44:19 46:9,22
143:11 154:22	object 107:8	20:23 158:15	47:6 56:24
155:18,20	108:15 109:15	obligation	62:24 63:1
162:16 171:11	197:11	20:18	65:13 70:18
171:14,15,22	objection 12:15	obtaining	71:10 72:12
172:16 173:2,5	19:25 25:6	150:21	73:14 74:5,21
173:10 175:1	39:11 42:11	obviously 46:2	76:17,20 84:10
178:25 181:13	52:20 55:7	252:11 289:25	86:19,23 88:18
193:7,15,24	56:8 60:9	occurred 231:5	89:1,6,13,18
195:11 204:10	65:23 70:3	occurring	91:23 92:9
205:22,24	79:11 99:10	236:19	94:2,17,22
206:24 208:4	100:2 108:23	ocean 249:7,13	95:13,18,22
208:20,21,22	109:15 115:2	249:14	97:3,15 98:13
209:2,4,5,10	125:6 131:19	odd 175:11	98:16,24
224:25 225:2,6	131:24 136:11	offered 66:4,18	103:16 105:5
225:16 229:8	137:7 138:7	279:12	106:2 108:22
229:11,15	150:1 163:11	offering 263:8	109:6 110:6
244:4 255:1	164:4 188:11	279:8	114:20 115:10
260:13 261:18	193:3,22 194:2		116:2,14,19,25
	200:18 210:25		

[okay - opinion]

119:17 120:23	215:13,22	ones	16:4 24:6	47:24 48:10,12
123:25 124:12	218:13 219:10		26:7 168:5	48:13,18 51:7
125:5 128:4,11	220:7 221:24		246:9	56:11 57:10
128:21 130:24	222:8 223:11	online	36:8,14	58:4,9,20
131:1 132:6	227:19,24,25		36:16,17,19,24	61:12 63:2,24
134:6 137:15	228:19 229:18		37:13 38:2,11	66:21,23 67:18
137:18,20	229:24 230:11		38:15,20,24	69:16 73:14,21
138:19 139:8	230:25 232:2,9		39:9 43:15	73:23,23 74:1
140:8,21	232:25 234:8		45:11,20 48:24	81:12 83:9
141:21 142:5,5	236:11 237:10		49:3,8,11,15	94:25 97:12,13
142:7 143:10	237:18,23		50:14,16	98:25 99:3,23
143:13 145:6	238:2 239:20		161:24	100:13 103:23
146:10 147:7	241:5 249:4	open	20:11	104:5 109:8
147:12 148:21	250:13 251:19		142:6 180:20	110:16 112:21
150:5,7,12	252:4 253:5		204:21 236:3	115:12 117:2
151:1,2 154:17	255:13 258:2	operating		117:19,23
155:4,11,16	262:24 264:2,5		157:19	128:17 147:1,8
156:3 157:10	266:18 268:20	opine	31:11	162:7,21
157:13 158:8	269:13,15		94:25 277:17	166:18 182:19
161:9,15	270:5,6 271:4	opined	59:21	189:12 190:4
170:25 171:16	273:25 274:22		288:1	214:14,21
172:11,11,12	276:16 277:16	opines	214:5	230:10 231:9
173:11 174:11	279:12 280:19	opining	65:19	234:10 246:18
174:13,19,20	282:8 283:5,13		66:15 74:6	246:25 250:25
176:3,13	284:22 286:3		232:5 267:16	255:8,25 262:8
177:19,19	289:8,11,21,22		278:14	265:18,25
180:1,19 181:2	291:2,23 292:1	opinion	18:23	273:4 274:8
182:9 188:15		once	19:5 20:6,7	276:11 279:6,7
189:5 192:4			23:24 24:9,11	279:16,17,20
193:8 196:21			24:11 26:2,5	279:23,24
197:4,6,13			27:4,13 28:19	280:8,13,16
198:1 204:23			35:6 40:5,17	284:23,24
205:2 206:7			41:7,22,25	285:5 286:8,25
211:4,15			42:8 43:14,22	288:7 289:11
214:13,24			44:2,4 47:15	

[opinions - part]

opinions	19:1 19:23 23:2 24:1 41:4,9 74:3,11 214:17 219:16 221:11 221:13 223:14 224:2 225:3 275:25 279:14	organizations	174:14,16 50:13,16 263:20 origin 154:1,7 180:15 original 294:13 295:10,21 outcome 10:3 outside 109:5 113:10 173:23 279:13 overall 68:1 76:5 122:14 205:14,19 207:6 overcounting 87:24 overlap 88:7 91:15 288:25 overlaps 34:9	174:14,16 175:25 177:18 177:20 178:4 180:21 181:6 181:16 227:19 295:15 296:4 297:4,7,10,13 297:16,19 pages 1:25 180:17 295:14 295:17,17 296:3,6,6 paid 13:4 14:24 15:8,10 50:13 50:15 51:14 54:3,5 57:7 64:23 65:6 66:9 68:12,13 129:4 209:15 231:13 256:13 256:13 257:16 259:19 282:10 285:1 291:22 panel 288:10 paragraph	165:9,13 166:5 167:19 168:12 168:19 177:21 184:3,10 196:13 241:16 253:6 263:16 paragraphs 168:7 parentheses 205:6 207:11 parenthetical 165:23 parse 84:25 90:4 parsing 40:12 part 24:23 26:13 31:2,3 34:5 41:18,23 46:18 49:19 51:13,14 75:12 75:23,23 76:2 78:20,21 85:25 87:16 92:23 93:1,4,4 104:5 111:15 132:5 136:7 186:1 190:3,23 216:25 217:9 217:15 218:2 221:11 229:13 229:13 247:25 250:9,10,11 251:14,16 258:3 260:6 262:5,10
ordered	217:13 221:20	p			
orders	44:18 288:20	p.m. 292:6,10	105:23 106:1,2	229:13 247:25	
oregon	1:22	page 7:3,11 8:2 85:10 102:5 103:3 167:18 172:2,3,9,16	106:11 137:16 138:18,20,22 138:22 140:14 141:7 144:13	250:9,10,11 251:14,16 258:3 260:6 262:5,10	
organization	50:1 241:20				

[part - percent]

263:10 264:14	156:9 203:2,14	patents 36:16 38:15,22	263:17,18,24
265:1 266:21	203:18 278:5	patterns 62:17 170:11	pays 57:10 68:21 111:17
267:4,11,14	partner 72:16	pause 53:18 172:22	182:17 247:3
268:11 273:11	parts 21:12 41:18 75:19	pay 61:11 62:6 63:20,23 64:10	254:9,10,10,25 259:13
participant	76:6,9		pdf 295:12 296:1
51:14 54:9,19	party 10:1 46:4 57:22 58:1		peace 231:18 231:21
70:12	59:9 62:1,7,10 62:11,12,16,22		peifer 6:13
participants	71:8 112:2 125:20 158:17		penalty 11:6 293:2 295:16
50:25 51:2,9	181:23 184:5		296:5
51:12 54:4,6	188:10,19		people 14:20 48:16 62:15
54:14 65:20,25	202:14,14,20		75:5 111:18,21
66:16 67:8,21	202:22 206:9		113:16,16
68:10,13,14,22	208:16 211:12		114:8 117:16
69:19 70:22	211:18,24		121:3,12,18,21
252:23 253:23	228:18 235:5		122:3 128:12
253:23,25	235:14 238:1,9		128:16,19,24
254:2,3,3,25	239:14 240:7		128:25 154:14
259:13,15,17	240:17,19	paying 13:6	154:15,20,25
259:18	242:20 243:20	177:23 178:1	184:8 197:18
participate	270:10,20	182:25 183:6,7	233:4 235:8,10
65:22 66:3,17	275:8 278:22	183:8,9,10,11	235:12,16
particular 26:7	280:1,19,20	184:15 187:9	242:14 245:5
30:9 32:11	281:8,14,16	191:2 220:3	264:17 266:7
35:3 45:21	294:18	291:20	287:12,20,20
48:15 53:6,24	pass 269:14	payment 60:23	percent 85:17
53:25 54:22	past 62:4 130:5	62:5 70:1,6	86:9,13 87:3
59:8 122:18	patent 36:13,21	191:10 241:17	88:20 89:3,5,9
168:7,7 189:18	36:23 38:9,21	259:1,9 261:5	89:14 101:23
199:11 202:2	42:21 130:18	payments	105:14 121:14
248:13 256:24	131:17 194:13	49:24 50:12	
257:1 277:25		67:17 230:18	
287:8			
parties 9:11			
59:11 134:11			
134:15 135:3			

[percent - pin]

121:15,15	92:17 117:15	periods	121:14	81:3,7 83:5,6
123:21,22	121:16 124:14		170:21	94:6 252:23
127:10 128:6	127:18 128:16	perjury	11:6	253:10,12
128:10 137:22	128:18 141:7,8		293:2 295:17	personalizing
138:3 139:19	144:17 153:18		296:6	248:3
140:16 141:10	161:11,13	permission		personally
142:9,20,21	182:13 204:15		273:17,23	267:1,20
143:25 144:12	percentages		276:21 277:2,5	perspective
144:17 145:3	153:7,10,21		277:8	108:1 133:1,3
157:2 158:5	159:20,21	permit	253:7	279:3,4
159:3 162:19	198:10,15	permitted		pertains 294:12
172:18 173:3,4	perfectly 267:6		213:18	pga 106:17
173:6 174:23	perform 18:4	person	52:2	107:18 108:5
175:2,11,25	20:13 92:3		233:7,9 238:21	108:10 109:3,4
182:4 183:20	207:8 274:24		238:21 253:2	pga's 104:22
183:23 185:18	performance		279:24 280:8	ph.d. 6:14
185:20,20,21	15:3 32:12		287:3,8	phone 71:3
185:24 186:22	performed 18:7	personal		193:7,9,12,15
187:15 204:9	153:16 191:24		279:16,17	193:24 235:25
204:10,12,13	207:21,22		280:15,16	237:25 257:10
204:24 205:5	208:13,15,18		286:6	291:16
205:11,13,22	period 88:4	personalization		phones 9:9
206:7,16,19,24	93:22 97:17		77:23 78:13,15	259:7
207:1,11,19	101:3 110:1		78:17,18 79:7	phonetic 21:16
208:3,11 209:3	140:25 149:13		81:11,15 89:8	21:24
209:5,8,9,9	162:16,16		89:11 248:25	phrase 77:2,8
210:2,9,21	165:22 181:12		250:15 270:25	138:14,25
211:5,11 212:9	196:25 198:3		276:10,13	177:25 226:17
212:11,12	209:3 216:12	personalize		226:23
224:24 225:5	216:21 217:12		247:15 248:9	pick 9:8
225:10,12,15	218:6,24 219:5		248:19	piece 76:4,17
229:15 248:12	219:13 220:20	personalized		76:18 107:15
249:18	221:19 274:4		79:2,3,4,18,21	107:15 193:1
percentage	295:18 296:7		79:24 80:2,3,7	pin 107:1
86:13 92:15,16			80:11,15,17,19	

[place - premarked]

place	9:11 32:19,25 102:14 105:18 112:11,16,16 113:15 116:15 116:22,23 117:11,12 183:17 184:16 184:19 187:8 187:21,24 189:7 190:24 192:5 294:5 placed 209:15 placement 30:6 32:19 183:11 187:10 191:8 191:10 placements 183:10 places 153:23 193:5 placing 32:25 33:8,10 111:4 111:13 134:12 176:19 plaintiffs 1:5 2:5 3:3 4:3 7:22 8:6 10:15 17:8,10 21:3 99:17 100:1 148:24 149:14 202:25 215:18 231:4,6 233:13 233:16 238:6 238:10 243:8	247:19 273:6 273:15 platform 136:20 play 74:4 94:19 254:19 255:18 255:21 256:8 276:13 played 256:4 276:10 please 9:7,9 10:5,25 11:3 69:4 112:11 137:19 151:20 181:7 266:14 plugged 153:22 plus 36:15 66:9 66:10,10,11 67:3,5,6,7 228:10 pockets 176:23 176:25 point 30:17 35:25 46:7 52:1,12 57:17 60:14,18 80:1 80:5,9,12,13 81:21 88:2 91:21 93:8,11 93:14 94:1 102:19 117:3 120:21 142:11 143:11,24 144:18 145:1 149:5 151:13	positing 54:24 109:18 115:22 position 231:5 231:6 243:7,11 268:24 269:1 posits 112:21 possibility 104:6 106:22 133:12 285:5 possible 15:10 62:20 148:20 170:9 178:16 188:16 189:10 189:14 192:9 195:8 239:11 240:4 242:9,12 249:17,22 270:20 possibly 187:19 post 157:23 158:9 potential 32:24 34:4 56:1,6 60:5 126:1 potentially 33:1 34:4 35:14 66:10 practice 20:24 220:6 precision 262:23 precluded 82:12 premarked 16:21
--------------	---	--	--

[premise - profits]

premise	149:19 156:12 232:2,7	233:20,22,23 234:1,9 239:7	private	9:8 50:1 230:20 231:15 238:23	272:17
preparation	39:6	239:9,12,13 240:6 247:4	probably	12:23 22:18 23:8,13 73:12 148:6,6	product 133:6 133:10 142:16 192:15 194:16
preparing	162:6 272:21	248:15 249:7 250:1,15 252:6	probative	194:21 195:4 197:5 210:23 234:18	products 41:15 41:16 98:2,5 132:18 139:25 234:24
prerogative	244:9	252:7,16 253:14 254:22	procedure	148:8 214:17 245:23 246:19	professional 2:20 20:24
present	5:19 6:3 10:7 147:25	256:9,22,24 257:2,10,11,22 258:10 259:11	proceed	249:15 11:1	professor 6:7
presentation	139:20 140:2	260:4,7 262:4 262:16 266:2,5	proceeding	149:8 295:19,20	profit 90:12 97:19 98:19
presenting	19:5	266:9,9 267:17	proceedings	10:5 294:4,6,8,14	99:1,5 100:16 118:22 130:21 135:8 189:24
president	6:11	282:9	process	29:10 29:12,19 30:3	190:4,21 194:7 194:8,15,20 198:22 216:23
presumably	46:19 193:9 248:25 249:7 260:13	primary 24:6 prior 27:23 184:3,10 234:10 294:7	privacy	42:24 42:25 43:4,6 43:10 50:17	profitability 41:15,16
pretty	126:19 142:24 229:12	prioritize 116:7 116:8,8,9,18	privacy	31:18,21 34:15 34:22 36:2	profited 129:19 134:21 135:10
prevent	263:19	77:11,19,21,22	processes	39:3 114:4,13 181:17 30:14 30:25 33:19	profits 14:22 14:24 96:4,9
previous	39:1 85:15 156:1	78:3 199:18	produced	119:16 33:22 34:1,10	96:23,24,24 97:2,13 99:24
previously	15:22 58:14	200:21,23		34:21 91:16	100:8 117:25
price	32:7,7,21 48:15 51:1,24 52:18,25 53:10 53:12 54:22 63:24 64:24 67:10,12 68:12 68:13 231:13 231:18 233:7 233:14,19,19	201:3,17 232:18 236:4,8 237:11 241:11 245:17 264:14 265:5,15,18 270:9 285:17 286:10 287:22		123:4 154:7,8 154:10 155:13 155:14 234:20	120:18,18 129:16 130:3 130:16 133:9 134:23 181:8

[profits - question]

273:4,21	proportion	providers	q
prohibited	83:18 137:23	238:17 239:22	qualcomm 16:6
97:18,23	138:4 140:17	provides 29:11	qualify 27:18
110:17 125:14	161:24 166:7	60:13,18	quality 217:4
prohibition	168:13 180:3	providing	quantified
118:9 119:21	194:20 205:7	36:23 238:16	126:20,23
125:23 135:5	206:17 207:12	240:15,16	127:3
projects 145:2	210:4,11,21	242:2,4 280:7	quantify
promise 134:19	211:6 217:1	public 34:24	256:23,25
134:19,20	propose 68:20	35:3,5,11,14	258:9
147:2 197:21	proposing	publicly 34:24	quantifying
promo 84:14	156:24 157:23	publish 251:19	17:7 95:6
84:18,22 88:7	protective	pull 204:25	quantities
89:23 90:20	44:18 288:20	220:1	171:21
91:12,13,16,17	provide 18:10	pun 249:21	question 17:2
91:19 93:19	19:22 20:5	purchasers	25:12 27:24
95:9 141:9,12	40:4,16,19,20	122:3	31:3 34:14
152:17 161:18	40:21,24 48:16	purports	37:16,17,19
162:10 164:2	54:15 64:23	162:15	45:8 48:5
166:20 167:21	65:3 75:6	purpose 225:24	50:19 58:17,18
168:13,25	119:15 217:5	248:18	58:24 59:10,19
178:16,20,21	242:18	purposely	59:24 64:2
179:3 180:2,3	provided 24:15	284:3	66:14,25 67:14
185:11 186:20	25:14,23 44:2	purposes 36:20	67:16 68:20
189:8 190:18	44:4 75:16	75:6 81:11	69:9,18,21
191:3,17 192:6	93:22,24	82:14 91:20	73:18 77:2
197:2,8 198:4	161:22 162:25	97:19 203:10	79:5 86:22
198:14 203:25	163:7 203:24	251:22	90:14 95:10
208:24 212:19	204:5,6 212:22	put 35:24 71:2	97:5,8 100:16
213:5,7 217:2	212:24 252:11	102:14 147:3	101:1 102:19
229:9	277:14 295:19	161:7 182:21	105:13 107:2,6
proof 57:25	296:8	196:24 240:10	107:10 108:9
properties	provider	256:16 286:15	108:14 126:22
133:20	239:14 240:7		138:8,16
	240:17		151:21 155:22

[question - rebut]

155:23 156:1	quite 99:15	219:10 220:17	reallocate
160:3 174:20	127:16,16	247:1	124:18 133:19
178:15 189:2	132:4 167:13	reached 18:25	really 30:9
196:13 200:2	243:3	79:5 88:3	45:13 71:23
207:23,24	quote 178:1,2	124:15 126:2	73:7,7 76:13
208:9 210:8	quoting 178:3	127:11	107:11 129:15
213:15 216:9	r	react 134:11,16	171:4 174:17
217:21,23	r 6:9 297:3,3	271:14	193:20 194:25
218:8 219:22	r&s 296:1,9	read 19:10 21:2	195:24 221:1
220:10,14	raise 11:2	21:5,12 22:2,5	249:11,19
221:10,15	raised 232:21	31:20 39:19	290:11
222:1,21	ram 130:20,22	42:8 72:11	reask 99:14
225:13 227:6,9	131:12 195:13	85:6 95:16	138:15 220:14
238:15 255:14	195:23	145:7,14	reason 12:18
257:18 263:4	random 162:14	148:24 149:1	59:21 60:5
264:11 267:6	162:15 237:12	165:22 169:8	81:16 149:8
267:11,15	randomly	169:15 181:4	159:13 192:10
269:2 276:18	102:9	214:14 215:4	211:15 235:9
276:22 278:10	rate 15:2	220:13 222:6	240:8 291:8
278:12 279:9	139:15 172:17	227:5 276:21	297:6,9,12,15
279:13,25	173:1 174:22	293:2	297:18,21
280:6 281:3,7	175:7	reading 17:12	reasonable
281:11,13	rates 204:4	21:25 33:20,22	37:4 42:3
282:16 288:15	rather 59:6	33:25 50:3,18	130:13 204:14
question's	115:13 184:19	72:3 145:20,21	209:6,7
255:15	189:22	145:23 177:16	reasoning
questions 12:8	ratio 92:5,20	177:17 179:24	168:1 252:5
103:11 120:24	93:16 205:15	179:25 180:12	reasons 78:9
250:18 268:18	205:19	215:4 295:23	191:11 244:5
270:5 275:16	rdrz 7:18	296:9	246:6
276:6 283:14	reach 78:14	real 129:22,23	rebecca 1:21
quick 196:22	121:2,12,18,20	132:11 219:24	2:19 9:24
196:23	121:21 122:7	220:2,5,8,12	294:1,24
quickly 181:5	125:3,25 126:6	243:7 251:2	rebut 19:11
	127:9 133:18		

[rebuttal - related]

rebuttal 272:20	recent 28:1	recorded 9:14	reflect 86:13
recall 21:14,20	29:2 121:14	181:22 184:4	253:15
21:25 24:7	212:11 229:8	recording 9:10	reflected
26:24 28:14	recess 71:16	recordkeeping	222:16
31:9 34:19	110:9 144:6	247:19	reflects 144:17
35:2 37:6,12	174:4 200:5	records 61:2	165:25
43:11 47:11	230:3 269:18	154:11	reframe 97:5
48:21 94:7,8	283:10	red 199:22,22	refresh 141:19
110:18 145:20	recognize	205:5	222:20
145:21,23	284:24	reddit 251:19	refreshed 24:9
148:1 170:18	recollection	redirect 290:17	27:3,12 28:18
170:24 171:16	23:1,23 24:10	291:9	29:4
171:22,23	27:3,12 28:19	reduce 117:2	refreshes 27:23
200:12 225:8	29:5 37:4	121:19,19	refreshing 23:1
225:10,24	45:10 222:20	reduced 88:13	23:23
227:15 228:8	recommendat...	88:19,20 89:5	refuse 264:14
228:13 269:12	106:10	reference 36:21	264:15
275:15 276:22	record 9:6,12	referenced	refused 282:17
276:23 278:10	10:8,11 28:22	295:6	refusing 268:16
291:1	35:19 53:14	references	268:18
recalling 39:13	71:12,14,19	227:25	regarding
receive 70:21	77:24 86:25	referencing	255:17
79:18 80:7,11	91:14 110:8,12	166:6	regardless 64:1
80:15,17,18	124:11 141:25	referred 288:2	185:10,12
101:7,21 102:3	142:10,25	referring 16:16	registered 2:20
102:13,23	143:8 144:5,9	25:24 29:13	relate 41:1
104:19 112:23	161:7 164:16	41:20 122:15	109:20 186:5
117:24 118:1	164:25 165:2,7	122:17 138:20	270:8
received 81:3	169:8 174:3,7	138:23,24	related 10:1
receives 117:18	199:25 200:3,8	163:17 171:17	15:1 24:16
181:9 241:22	204:2 214:1	180:1 191:19	25:15 26:14,20
receiving 80:3	230:2,6 269:16	191:24 204:24	37:4 39:4 41:1
81:7 104:23	269:21 283:8	205:8	42:24 44:6,10
253:12	283:12 292:5	refers 169:17	44:11 72:7
	294:8,11		77:6,8,17 92:1

[related - report]

93:18 104:22	relevance	remains 87:16	21:5,6,10,12,23
105:6 106:6,18	86:14,18 87:1	remember 14:6	22:1,2,3,6,9,20
108:6 109:4	relevant 170:25	16:12 23:11	22:22 23:10
165:8 171:2,3	186:2 267:6,14	26:12,17 28:4	24:12,21,24
181:9 201:8,12	267:18 268:1,6	28:4 114:3	25:25 26:4,22
213:12 233:17	268:11,13	120:22 206:2	26:25 27:1,10
relates 23:2	reliable 76:6,7	211:21 226:3	27:25 35:9,12
28:5,9 29:6	76:7 95:6	228:16 270:11	35:15 36:3,5,9
37:23 40:22,25	162:23 163:6	271:8,16,22	38:7 39:6,7,10
72:5 104:14	163:25 164:8	273:1,8 274:5	39:16,19,20
105:1 115:8	164:11,13,14	274:9 275:1,21	41:19 43:4,25
122:12,13,19	164:23 165:2,4	277:19,21	49:19 65:2
127:17 139:17	246:23 265:2	289:19,24	67:4 72:2,11
139:18 168:25	reliance 224:3	290:11 291:15	72:21 73:9
171:13 173:6	relied 35:11	291:19	74:9 78:19
201:2 206:12	74:14 75:2,3	remembering	88:3 99:12
225:23 228:17	81:8 164:8	21:7 123:21	105:21 118:6
259:6 285:25	166:21,23	remotely 10:10	118:11,12
287:22 290:21	167:1 226:14	rendered	126:24 134:4
relating 36:23	290:2	100:13 284:24	137:17 144:13
38:15 39:2	relief 17:7 18:8	rendering	145:7,15
74:11 99:6	relooked 72:25	73:21 103:22	147:24 165:10
161:23 166:6	rely 75:15,19	166:18 223:13	165:13 166:13
170:4 201:3	75:20 76:10,11	224:2	167:2,18 169:4
271:1 284:22	76:16 78:6	repeat 41:6	175:2 177:17
relationship	162:9 166:16	43:17 49:13	199:4 213:16
79:21,23	167:4 169:7	150:13 208:8	214:15,19,22
243:21	192:6 198:11	210:8 220:10	219:17 222:6
relative 51:7	212:8 223:11	replace 175:10	222:14,17,20
81:14 92:16,17	223:25 246:22	report 7:13	222:24 223:9
166:9 256:17	relying 76:3	16:16 17:4,9	223:10,18
294:17	154:2 162:22	17:13,16,23	224:13,15,17
release 145:19	234:15 246:20	18:3,7,11,22,23	224:22 227:1,5
released 157:11	remain 284:6	19:2,7,11,14,15	227:12,22
295:21		20:7,11,19	230:13 232:13

[report - revenue]

232:15 234:2,7	58:12 106:24	respondents	reveal 288:23
252:4 256:25	107:3	275:23	revenue 79:3
258:21,22	represents	response 13:17	79:25 81:19,19
267:4,12,14,16	205:11,13	25:12 115:12	81:25 82:2
268:7,11,19	206:17,19	119:21 124:16	83:20 84:14
279:15	207:20 208:12	125:23 126:5	85:17 86:2,8
reported 1:20	requested	135:5 162:2	87:15,25 88:4
152:3,3,5	29:17 294:15	180:16,22	88:8 89:10
reporter 2:19	296:1,9,10	responses 7:22	90:3,7,8,9,11
2:20,21 9:24	requests 82:17	8:6	91:18 92:11,13
10:10,25 11:2	101:21 126:25	rest 50:10	92:25 93:19,21
11:5 16:20	181:14	restricted	117:21,24
140:11 163:21	require 214:18	247:11	118:2 119:13
174:10 294:2	262:9	restriction	120:5,11,22
reports 19:10	required 66:24	238:8 248:20	122:13 131:6
21:2 38:5	67:19 179:11	253:15	137:24 138:4
41:18 42:23	requirements	restrictions	140:3,23,24
represent 13:4	57:21	247:9	141:1,2,9,12
13:6 44:13	requires 40:6	result 79:1	144:18,20
144:22 205:25	87:10 262:25	150:24 218:15	152:18 156:6
224:22	reread 169:20	246:22 284:25	157:21,22
representation	research 34:25	resulted 96:23	158:11 161:18
58:22 98:19,21	35:3,5,15 39:4	retain 13:14	162:10 164:2
99:6,8,8	263:20	retained 13:2,3	166:20 167:21
152:15	respect 36:1	13:12 15:12,22	167:23 168:14
representations	41:25 47:24	16:8 19:24	168:25 171:9
82:20	66:24 67:18	31:16 43:8,11	171:12,13
representative	79:7 94:18	43:13,21	175:19 176:18
64:20 68:3	135:15 216:10	283:20 284:5	176:19,23,25
264:6	218:14 228:20	292:9	178:19,20,21
represented	228:22 236:14	return 111:18	179:18,21
58:14 79:17	respond 13:15	264:11 295:17	180:3,4,12
137:24	responded	296:6	181:8 182:4
representing	149:13 217:11	returning	183:13 186:19
9:22 12:24	218:4,16	150:8	187:16 188:19

[revenue - role]

190:14,15	right	11:3 25:1	145:6 147:10	215:17,20
191:8,13,13,13		28:1 30:13	148:23 151:15	216:20,22
191:14 192:21		34:12 39:5,18	153:8,19	217:16 219:17
192:22 193:14		43:6 52:1,3,19	154:11,15	221:12 227:6
194:1 195:4,24		54:23 55:22,23	155:7 156:2	230:16,21
196:3 198:14		56:6 61:8 66:4	158:6,12 159:8	231:10,24
199:2,5,18		68:11,18 70:15	160:11 161:9	235:25 236:5
200:23 202:12		84:16 86:24	161:20 163:10	237:18 238:9
205:14,19		87:5 88:11,21	165:16 166:8	239:23,25
206:19,23		89:12 91:12	167:22 168:5	240:2,25 243:9
207:2,3,5,6,9		93:9 96:9	168:14 171:1,5	243:15 245:9
210:4,11,17,22		97:13 98:10	171:24 172:19	247:4,6,16,24
211:6 212:18		99:20 100:10	173:3 176:2,15	248:4,7,10
212:25 213:4,9		100:16 101:9	178:5,22	250:2 251:3,11
213:11,12		101:13,24	180:13 181:18	252:15,24
215:2 217:2		107:19 110:25	182:16 184:5	253:3,7,10
revenues	92:22	111:14,18,23	184:10 185:17	257:23 258:5
92:23 120:19		112:3,5,8,13	185:18 186:8	262:21 263:4
139:14,24		113:6,11	186:14,20	268:21 270:7
review	13:19	114:10,14,24	187:22,25	274:11 277:2
19:19 76:8		116:4,10	188:3,6,10	277:25 278:12
159:25 162:6		117:20 119:22	189:9,18,19	286:18 288:3
269:7 294:14		120:6 122:25	190:18,22,25	289:6,13,16
295:8,10,13		125:12,15	191:3 192:8	290:4
296:2		126:2,3 127:6	193:17 194:1,9	risk 232:17,18
reviewed	19:17	128:20 129:6	194:11,16,22	232:21
25:25 147:23		130:10,13,16	195:3,12,16	rmcgee 4:12
reviewing	73:5	130:25 131:6	198:8,11,22	robust 122:6
73:10 163:2		131:13,18	201:10 204:17	rodriguez 1:4
rid	175:19	133:5,6,13,20	206:1 209:15	2:4 9:15 295:4
riddled	162:12	134:9,16 136:2	209:18,25	297:1
ridiculous		136:4 138:21	210:24 211:19	role 14:16
193:17,24		138:25 139:3	212:13,20	19:22 20:2,4,5
riehl	6:7	140:19 141:5	213:6 214:6,15	47:3 94:19
		141:19 144:20	214:21 215:13	254:19 255:18

[role - santacana]

255:21 256:3,8	running 266:15	85:13 86:6	200:1,10 201:5
276:10,13	ryan 4:5,16	88:19,24 89:3	204:16 211:4
277:20,23	s	89:6 97:11	212:7 217:19
roles 14:17,17	s 7:10 8:1 297:3	99:16 100:7,25	217:20 218:13
rolled 155:6	sake 155:8	103:7,10,14,16	219:24 220:1,3
romano 1:21	sales 195:7	103:19,20	220:7,11,17
2:19 9:24	samit 6:14	106:2 107:4,9	221:4,10,17
294:1,24	sample 64:20	108:11,13,20	223:1 224:5,24
ropes 12:14	68:2,3 162:15	108:24 109:17	229:24 230:8
roughly 14:11	sampledadev...	110:6,14	230:16 231:2
14:13 22:17	172:13	111:12 114:3	237:16,20
33:11 86:1	san 1:14 2:17	115:10,22	238:20 247:13
round 128:10	3:17 5:10 9:1	117:19 124:12	250:13 251:25
router 66:11	9:20	125:2,12	252:15 256:21
255:5 257:11	santacana 5:5	126:21 131:22	258:14,25
257:14	7:5,7 10:12,12	131:25 134:6	259:25 260:11
row 85:22	12:6,18 16:21	136:14 137:15	261:6,12,17
89:22 153:5	17:24 18:24	138:13 139:1,4	262:7,15 263:3
royalty 37:5	20:3 25:11	140:12,15	263:10,13
42:4 130:13	28:1,11,22,24	142:7 143:9,13	265:13,25
194:23	29:1 35:24	144:1,11 145:9	266:19 267:2
rpr 1:21 294:24	37:18,25 39:15	145:16 150:5	267:13,23
rs 1:6 2:6 9:18	42:15 45:3	151:20 153:4	268:2,8,16
rsila 4:21	46:3,9,11 49:6	159:6 160:20	269:3,14 272:6
rujuta 14:5	51:4,11 52:24	163:16,18,22	272:13 274:20
rule 50:9	53:22 55:11	164:6 165:9	275:12 276:8
158:14 260:16	56:10 57:7	172:3,6,10	278:9,24
ruled 193:11	58:15,18,23	173:24 174:11	280:14 281:23
rules 108:21	59:5 60:11,20	180:24 181:1,4	282:8 283:5,13
109:18,23	62:6 63:22	184:23 185:9	284:22 286:17
296:8	64:16 65:11,14	185:17 188:15	286:23 287:11
ruling 216:11	65:17,19 66:2	192:25 193:4	287:24 289:5
run 90:22	66:22 69:6,14	193:23 194:6	289:11,17
193:16	70:11 71:10,21	196:21,24	291:2,23,24
	80:5 84:11	197:19 198:2	292:2 295:1

[santacana's - section]

santacana's	181:17 182:1	203:12,19	268:7,15,19
222:21	182:15 184:4	207:10 211:23	269:9 277:10
sat 12:12	199:4 205:17	212:8 213:13	279:13 284:17
save 82:16	214:22 236:3	214:10 217:17	290:17 291:9
120:16 241:14	237:25 251:18	218:12,12,14	screenshot
saved 241:3,4	258:15 277:11	237:15 243:23	205:2 208:12
saving 72:7	scenario 80:13	271:2 274:12	228:1
82:12 106:6,19	80:14 81:1,2,6	274:13 275:9	screenwise
saw 145:16	81:17 82:4,5,8	276:11 280:2	246:8
170:14	82:9 83:9,15	scenarios 78:20	scroll 142:3
saying 17:24	84:6,14,15,16	95:15 96:2,14	scrolling
28:14 110:22	87:9,10,14,16	218:11 274:7	172:24
112:20 115:24	88:9 89:21	277:13	sdk 181:23
116:3 117:1	94:3,18 95:20	schedule 92:7	184:5
118:17,19	95:21 96:1,1	92:10 138:23	sdks 135:22
128:9 135:24	101:15,20	152:8,10,12,14	186:7 211:24
136:6 139:5	102:1 103:24	152:19,24	se 3:7
141:4,5 146:23	104:10,10,12	153:5,11,24	searches 106:9
160:7,15,15,21	104:13,14,25	154:3 155:1,2	sec 161:10
160:25 161:3	105:2,8 108:18	161:14,17	second 3:7 8:4
164:10 175:23	109:7,8 110:21	164:2 165:15	44:12 61:1
176:14 190:9	115:6 117:22	165:20 179:25	79:15 89:1
195:17,18	118:13,16,18	180:8,9,11	95:2,16 122:12
198:13 213:22	118:20 120:10	295:10	122:13,22
215:15 219:21	121:1 125:17	schedules	144:2 146:16
223:25 224:10	127:7,8,23,24	168:12	163:17 172:8
239:25 242:24	128:1,2,4	schiller 3:4	172:23 180:10
243:13 260:16	135:15,17	10:14 16:9	180:23 189:4
says 87:3 98:8	136:3 137:4	270:4	secondly
111:20 112:15	151:3 158:20	school 6:9	146:11
114:15 116:21	178:20,21	schulte 6:15	section 17:4,13
133:17 139:1	184:18 186:9	14:5	17:16,22,25
142:20 143:14	186:11,12,16	scope 109:5	18:3 72:4
146:7 152:24	189:24 190:4	188:13 267:9	230:12 257:8
157:10 181:7	190:16 203:10	267:22,24	

[sections - settings]

sections 72:24	289:3	separately 77:4	128:24 129:19
see 37:9,21	seen 164:24	september	136:18 190:8
38:2 41:3,7	213:25	145:19	serves 112:7
50:3 85:19	sees 280:24	serve 29:20	181:20
101:9,11 102:6	281:18	82:23 83:4,5	service 120:6
102:25 108:3	segue 145:9	83:10 84:19,23	186:13 217:4
116:23 136:19	select 109:4	87:14,18,18,20	238:9 242:21
138:1,17 139:7	selected 102:10	87:21,23 94:5	serviced 234:21
141:4,4,19	selecting	101:5,16,18	services 72:17
142:15,20	256:19 257:10	102:3,4,9,20,23	106:13,20
143:2,14 153:5	self 182:16	103:1,25 104:6	245:18
156:22 157:5	sell 52:19 53:1	104:21 105:9	serving 25:25
169:13,24	195:1	105:17 106:17	26:22,25 27:1
172:12 173:11	seller 50:23	107:17 108:6	78:22 82:14,21
174:21,24,25	51:25 52:1,12	109:19 110:17	82:22,24 83:6
199:3 216:25	52:18,19,25	111:6 112:1	105:3 120:12
217:9 218:2	53:7 69:18	113:3,5,25	125:14
223:19 224:16	130:21 131:6	114:2 115:7,21	set 7:23 8:7
227:25 243:3	131:12,16	117:14 127:1	24:12 32:6,7
244:1 272:10	195:11	128:2,2,5	64:24 237:22
283:6 284:4	sellers 53:4,23	129:8,9 134:13	264:1 294:5
287:24 289:10	54:22 69:21	135:25 136:16	sets 15:6 114:6
291:23	send 249:13,14	137:3,10,13	163:9
seeing 101:15	sends 109:3	189:17 271:7	setting 70:14
143:2	sense 28:8	271:11,14	72:6 77:6,9,12
seem 42:9	173:25 191:18	272:5 279:2	77:19,21,22
123:12 164:16	233:9 240:12	served 19:11	106:4,5 158:15
178:13 244:11	252:3 279:4	20:20 22:20,22	199:18 200:22
278:23 281:10	282:7	23:10 27:10	200:23 201:3
seemed 170:19	sensitive 9:8	87:12,12 88:5	243:16 270:9
204:14	sentence 77:3	89:22 91:10,22	283:25
seems 157:1	119:25 184:22	91:24 109:21	settings 74:23
162:23 209:6	260:1	109:25 110:24	77:22 78:12
209:12 249:18	separate 51:2	118:15,17,19	201:13,17
249:24 279:2		118:21 128:23	284:13

[severity - sold]

severity 285:17 286:9	shut 213:22 215:11	sila 4:16 similar 52:15 77:12,19 106:12 170:20 171:19 191:16 199:7,17 202:3 204:10 207:8 209:3,11 229:12 234:11 241:8 255:9,9 255:10 258:23 287:17 similarly 84:23 200:25 264:6,8 simply 101:7 115:13 184:18 187:1 single 71:1 72:25 151:25 sir 110:14 sit 26:18 28:5 34:19 37:8 39:12 49:1,9 109:9 110:4,5 148:1 157:3 158:3,4 159:5 159:14 168:22 170:24 246:18 281:4 site 62:1,8 sites 57:22 58:1 59:9,11 72:8 72:15,17 106:7 106:12 112:2 66:1,7,12	sitewide 228:15 228:17 sitting 19:4 21:15 37:20 124:3,10 225:8 227:15 228:7 228:13 situated 264:6 264:9 situation 32:9 33:1 115:19 157:24 191:22 194:20 218:18 219:12 220:19 221:19 situations 29:17 84:21 115:19 137:10 137:14 158:19 162:18 177:2,9 177:13 178:9 191:4,5 270:14 six 7:23 8:7 size 66:5 slide 169:6,14 169:24 170:1,4 slightly 97:10 slip 234:4 sloan 6:9 slow 53:19 snyder 21:24 snyder's 21:25 sold 132:17 133:10 195:15
share 14:22 72:18 152:25 153:5 156:8 159:20 161:19 162:10 163:25 165:21 167:10 175:19 179:21 180:12 239:6,8 242:14 280:21	side 185:3,4 69:1,5 240:22 295:16 296:5 signal 102:3,13 102:23 105:17 115:20 signature 294:24 295:21 295:23,23 296:9 signed 54:14 88:5 89:23 91:11 113:5 114:18 137:24 138:5 139:23 139:24 140:2,3 140:18,24,24 141:9 142:21 142:21 143:16 143:18,21 144:19,21,21 152:18 161:18 168:15 175:20 175:21 176:1,5 176:9 178:25 241:10,11		
shared 159:20 254:6 shares 14:23 166:18 shawna 5:22 9:22 short 173:18 shorthand 2:19 294:2,9 show 72:16 92:5 111:18,21 111:21 112:18 114:19 115:24 115:25 121:5 122:10 136:22 237:11 257:7 269:11 showing 136:21 shown 113:15 113:22,22 114:7,17 115:14,15 shows 112:7 247:21 260:19	single 71:1 72:25 151:25 sir 110:14 sit 26:18 28:5 34:19 37:8 39:12 49:1,9 109:9 110:4,5 148:1 157:3 158:3,4 159:5 159:14 168:22 170:24 246:18 281:4 site 62:1,8 sites 57:22 58:1 59:9,11 72:8 72:15,17 106:7 106:12 112:2 66:1,7,12		

[solemnly - state]

solemnly 11:5	source 102:8	specifying	ssct 228:10,12
solution 235:5	118:22,25	150:18	228:14
235:15	162:23	speculate 134:3	stack 172:18
solutions 9:23	sources 97:19	135:12 265:23	174:22 175:8
9:25 235:17	182:6	speculation	staff 14:20
236:9 292:9	space 36:15,16	66:19 111:7	72:24
295:7	36:17,24 38:2	113:18 115:3	stand 89:8
somebody	38:11,20,24	125:7 126:9	standard 48:1
63:10 229:22	speak 23:20	133:21,24	132:23
someone's	225:11	197:14 262:1	standpoint
147:6	speaker 53:16	262:11 265:9	32:23 41:11
somewhat	speaking 30:8	265:21 266:10	79:25 90:12,12
100:5 273:9	39:13	speed 217:4	146:1 149:19
soon 173:18	specific 27:17	spend 73:3,5	stands 228:14
229:20	177:3,10 203:8	118:3,4,8	start 27:7
sorry 17:11,20	223:21 225:23	119:21 120:3,4	33:15 76:19
21:22 27:2	225:24 236:20	120:13,14	97:17 99:2
49:5 80:15	241:22,24	124:18 127:2	101:3 131:5
84:2 87:21	250:19 258:9	127:12 182:2	149:13 174:14
88:22 90:25	286:24	182:10,13,23	196:25 198:3
92:6 117:11	specifically	186:23 192:15	216:11 217:12
119:5 153:11	20:8,22 22:15	212:9,12	218:5,24 219:5
155:13 157:6	26:24 39:13	215:25 271:6	219:12 220:19
169:19 180:8	47:11 54:16	271:19,20	221:19 253:12
180:10 184:21	168:8 223:20	272:1,11,15	277:17
205:10 208:7	224:19 225:9	spending	started 157:8
219:18 227:20	225:11,25	121:20 126:20	starting 29:14
251:8 252:20	226:3 227:18	spent 13:21	80:1,5,9,11,13
sort 146:2	254:9 256:23	14:12 73:11	93:7 151:12,13
150:3 173:22	259:6 270:15	126:15 127:9	151:25 157:14
266:1	specifics	215:25	277:6
sound 20:15	202:16	spoke 222:24	starts 139:5
75:22	specifies 45:21	spreadsheet	210:15
sounds 116:21	specify 237:16	7:17	state 10:5,7,20
290:1			11:6 294:2

[state - supplemental]

295:9,12	stop 78:17,18	202:5,11,19	subscribed
stated 265:12	214:23	203:17 204:9	294:20
statements	storage 181:10	205:3,12	successful
24:16 25:14,23	straight 145:11	208:12 225:1	118:23
25:24 95:8	strategy 40:22	226:23 228:1	sudden 111:20
states 1:1 2:1	street 2:16 3:7	234:14 252:14	112:15 253:12
9:16 169:25	3:15 4:8 5:8	252:18,22	suddenly
status 146:13	9:20	253:22 254:6	186:24
146:24 147:6	stretch 173:15	254:25 256:14	suffice 33:7
147:18 148:10	strike 60:25	256:17 259:3,6	183:25
150:10,16,25	80:8 95:10	259:12,14	sufficiently
151:23 157:15	151:13 167:16	264:4,6,20,20	60:21 74:14
157:19 158:1	170:2 186:10	265:3 272:15	suggest 48:23
160:19	227:20	272:21 275:16	suggested
statuses 148:16	structure 41:24	275:24 285:10	275:18
stenographic	42:3	287:17 290:2	suggesting
35:19 71:12	stub 153:15	290:21 291:14	106:25 108:10
124:11 141:25	studied 122:24	291:19,22	271:24 272:15
142:25 143:8	123:3,4,4	study's 67:17	suggests 49:3,7
204:2 294:1	286:2	275:19	suite 3:8
stenographic...	studies 65:1,7	stuff 73:10	summarize
1:20	123:1 192:3	101:12	16:14
step 180:1	259:4,24	sub 181:13	summarized
213:16	study 54:3,5,14	subject 30:9,15	85:14 255:24
stepping 94:24	57:7 59:16	35:7 39:21	summarizes
steps 207:7	60:7,13 64:10	43:9 44:3,5,6	85:21
254:4 275:5	64:25 65:5,12	65:15 269:9	summary 139:9
stick 84:6	65:21 66:4,16	278:3 287:11	142:13,15
120:22 147:12	67:7,21 70:22	subjects 24:4	summer 5:20
147:12 153:13	70:25 76:25	subpoena	10:16
sticking 119:18	123:7 134:15	13:15,17,19	super 103:9
153:4 186:16	149:12,16	267:5 268:21	supplemental
stipulation	191:20,25	268:25 269:4,5	7:21 8:5 72:14
295:20	200:11,15,21	269:12	180:16
	201:12,17,21		

[supported - swaa]

supported	surrender	97:18 99:6,18	153:2,6,16,17
168:4	49:25 230:19	101:4,5,7	153:18 154:9
supporting	231:14 241:18	104:1,19,23	156:13,17
168:12	surrounding	106:11 107:18	157:15,19
sure 13:24	247:20	108:8,21	158:1,15
16:15 17:3	survey 64:20	109:22 110:17	160:18 161:20
18:19 28:3	265:24	110:23 111:6	161:25 162:10
35:22 36:19	surveyed	111:22 112:2	162:19 163:5
43:18 45:20	265:11	112:17,17,23	164:1,17
47:25 65:16	susman 4:15	113:4,5,9,17,22	165:15,21
71:6 75:20	5:20 10:19,23	113:23 114:17	166:7,9,17,18
82:9 83:2	13:10 15:23	114:18 115:7	166:20 167:10
87:24 88:16	16:5	115:14,20	167:22,22
93:17 94:11	susmangodfr...	116:23 117:14	168:14,16,19
95:3,17 101:24	4:21	118:9 119:22	168:20,24
103:13 105:14	suspect 162:21	120:6,12 121:6	170:11,20,21
105:20 107:7	swaa 54:18	121:15,16	171:9,18,18
107:13 111:20	57:16,19,19,24	122:16,19,19	173:3,6,7
123:11,13	61:8,11,24	123:2,7,16,21	174:14,15,21
132:4 136:23	62:7,11 71:23	123:22 125:4	175:7 178:25
142:3,12,24	71:25 72:13	125:15,19	186:25 190:2,5
144:14 151:14	77:13,20,22,25	126:1,7 127:5	190:15,17,22
151:16 157:2	78:8 79:6,10	127:11 128:12	191:9 197:21
158:5,6 159:3	79:16,17 80:1	129:17 133:18	198:5,6 201:2
159:6,11 160:8	80:3,6,10,24	134:13 135:6	201:18 202:1
167:13 169:17	81:3,4,7,8	135:20 136:1,7	208:1 213:24
175:17 180:24	82:13,13,20,21	136:21 146:13	214:24 215:17
183:18 184:25	83:11,18 84:1	146:24,24	215:23 217:14
189:6 195:5	84:2,19,22,22	147:3,6,18	219:15 220:21
200:1,2 206:21	86:14,18,19	148:10,15,16	221:21 237:22
221:3 226:10	87:12,13,18	149:6,15,23	238:5 239:11
246:12 248:12	88:5 89:23	150:9,16,18,20	240:5 241:12
249:18 270:24	91:11 94:5	150:25 151:11	243:8,16
276:16	95:24 96:4,5,8	151:12,23	247:15,23
	96:13,19,19	152:1,15,18,25	248:6,9,11

[swaa - technical]

253:24 267:8	76:17 87:17	takes 104:5	169:2 170:10
268:8 271:7,11	91:18 96:11	247:20	193:19,21
271:15,20	97:15 98:6	talk 20:6 36:9	194:5 195:6
272:1,3,9,16	103:5,8,12	46:9 65:2	225:1 228:24
273:16,22	105:19,21	71:22 72:2	234:7 237:21
274:3,14,25	107:15 109:24	176:16 257:5	242:19,20
275:11,20	110:6 114:16	259:4 274:11	244:25 246:10
277:7,10 278:6	118:7 127:21	282:16	250:8,11
278:16 280:3	131:10,15	talked 23:22	253:22 254:8
281:20 282:9	132:7 133:9,11	25:9 38:25	254:12,14
283:16 286:20	137:16 138:17	68:6 70:24	258:6 262:23
286:21,22	142:2 145:18	111:16 203:22	270:13 283:16
287:2	151:17 158:5	204:6 225:9,19	286:19
swear 10:25	160:8 169:4	225:25 229:6	talks 18:8
switch 65:14	171:24 172:16	246:9 253:21	39:20 203:25
161:9 176:15	173:24 174:11	259:2 261:3	tampa 4:10
switched 137:1	180:19 196:14	285:24 288:24	targeting 248:3
system 157:19	213:15 214:14	talking 26:8	task 47:14 50:5
t	227:21 229:24	27:8 30:13	50:6 51:22,23
t 7:10 8:1 297:3	246:3 247:7	34:16 35:7	55:15,16,18
297:3	248:15 251:14	38:8 52:15	129:15 190:20
tab 142:13,15	251:16 263:15	53:20 74:16	241:21 251:4
143:7,11	263:22 265:8	77:12,19 78:6	tax 37:15,24
table 172:12,15	265:11 269:15	80:24 82:5,9	team 19:19
174:18 258:15	275:5 283:5	88:17,17 91:5	284:21
258:21,23	292:3	94:3,4 95:25	tech 101:22
tablet 257:11	taken 2:14	97:9 105:1,2	technical 29:15
291:17	69:22,24,24	107:12 109:10	30:1,10,12
tablets 259:7	71:16 110:9	110:15 114:4	31:15 32:2,3,3
tagging 228:15	144:6 152:14	123:23 125:13	33:4,12 101:23
228:17,17	174:4 200:5	130:5 132:3	102:18 105:13
tail 177:21	230:3 243:14	135:17 138:1	105:15 107:12
take 9:11 24:20	243:20 248:21	142:10 144:11	108:1 109:10
49:20 58:25	269:18 283:10	161:12 162:1,5	109:12 146:1,4
65:17 71:10	294:4	163:15 166:17	147:16 148:19

[technical - think]

157:7 188:14	terms 33:3	217:2 266:18	56:22,24,25
technically	52:15 105:15	273:5	57:5 62:9,20
61:25,25	134:19 173:15	theft 232:18	63:14,18 64:3
102:20 146:13	228:6,8 233:22	theorize 246:25	64:3 65:8 67:9
146:14 277:12	236:4 252:22	theory 111:24	67:11 68:1,11
techniques	253:1,5 255:16	thing 72:20	68:23,23 69:7
29:9	275:19,24	99:18,19 103:4	70:6,9 74:16
technological	test 108:2	124:5 132:22	78:5,9 79:9
104:7	testified 12:3	146:16 181:18	80:4,23 82:10
technologically	12:10 43:5	193:24 283:15	83:7,21,22,23
103:25 105:11	178:8 210:20	things 23:5,6	84:3 85:9 86:4
107:17 108:19	211:2,23 270:7	47:1 97:10	86:21,21 87:5
technology	271:5 276:9	120:9 135:20	89:4 94:22
30:19	testify 12:19	141:22 146:7	97:9 100:4
tell 24:8 29:1	218:1	159:19 163:10	102:1 103:15
31:25 33:16	testifying 37:12	163:13 178:25	103:20 104:12
45:19 61:25	274:9 278:20	196:9 198:24	107:12 109:11
117:13 145:24	294:7	199:3 215:15	112:21 117:17
148:9 189:7,17	testimony 11:6	232:4,8 233:8	118:11,11
197:18 222:11	33:17 38:1	238:24,24	122:9,10,21
226:1 227:1,7	39:1 160:1,5	245:6 255:6	123:18,19,20
telling 121:24	224:8 233:13	256:6,18	124:3 125:9
121:25 130:6	233:17 261:8	287:21	126:18,19
184:8 237:5	265:14 277:22	think 12:21	127:14,14
240:1	292:6 293:4	14:11 18:11	130:7 132:2,3
tells 115:11	294:11	23:4 25:11	132:3 133:22
188:10 281:16	testing 47:9	26:15 29:14	134:2 135:16
ten 241:1	211:20	32:13 37:14	138:12,24
term 47:21,24	thank 10:24	38:6,6 44:23	139:6 142:11
181:11 227:8	17:14 89:18	45:19 46:5,11	142:24 143:4
227:11,14	155:4 276:5	47:2,14,20,20	143:24 144:12
228:9 233:20	291:3	50:18 51:16	147:7 151:7
terminology	thanks 99:25	52:4,5,6,8	152:22 155:17
101:24	100:9 118:9	53:15,19 55:8	155:19,20
	172:5 190:21	55:10 56:15,18	157:4,7 159:13

[think - told]

160:25 161:2	264:24 265:8	242:20 243:20	200:9 209:3
162:1,1 168:22	266:4 267:25	270:10,20	219:19,23,24
171:2,6 172:24	268:6,19	275:8 278:5,22	220:2,5,8,12
173:17 175:6,8	270:23 275:5	280:1,19,20	230:2,7 244:10
175:8,16,18,18	275:10 280:2	281:8,14,16	259:8 261:5
175:20,23,24	281:2 282:8	thought 21:17	266:13,15
176:13,17,17	283:4 285:12	61:13 73:1,1	269:17,22
176:22 182:16	285:19,20	79:13 112:23	272:11 283:9
184:24 185:7,9	287:6,7,16,16	282:23 284:7	283:12 289:6
185:11 190:9	287:18 288:6	288:19,25	292:3,10 294:5
192:18,18	288:21 289:3	thousand 14:14	295:10,18,24
194:18 196:11	289:15,16,17	63:9,17,19	296:7
199:15 204:12	289:19,19	three 14:17	times 12:17
206:1,10,11,13	290:19,19,20	15:25 65:3	15:12,24,25
206:13,14	290:22 291:13	142:11 205:18	55:12,13 58:3
207:25 210:20	thinking 160:4	throws 249:6	63:9,17,20
211:2 213:20	162:11 173:23	thursday 1:15	133:4
215:6,8 216:17	233:25 283:1	2:18 9:1	titled 139:8
220:9 221:22	third 57:22	tie 124:10	178:4
222:6,6,22	58:1 59:9,11	tied 17:8	today 12:9,19
226:21 229:19	62:1,7,10,10,12	210:21	12:24 13:5
231:16,16,20	62:16,22 71:8	time 9:10 10:5	14:20 26:18
233:23,23,25	112:2 125:20	10:21 14:9,11	36:20 39:1
233:25 236:13	146:21 156:9	15:15 19:3,9	55:12 220:10
236:13,22	158:17 181:23	22:5 57:17	246:19 270:7
237:12 238:4	184:5 202:14	61:15,18 62:5	271:5 273:1
238:12 240:13	202:20,22	68:19 70:14	275:16
241:24 242:23	203:2,14,18	71:14,19 73:3	today's 292:6
243:13 250:6,8	206:9,23	73:5 93:11,14	together 14:12
251:5 255:22	208:16 211:12	93:16 110:8,13	83:19
258:6,6,14,15	211:18,24	142:2 144:5,10	told 100:15,20
259:21 260:3	228:18 235:5	144:18,23	107:16 124:13
261:3,4,9,15,19	235:14 238:1,9	151:17 156:15	127:10 186:24
262:4,22,22	239:14 240:7	156:18 160:8	190:24 222:15
264:9,21,23,23	240:17,18,19	174:3,8 200:4	223:12 224:1,5

[told - trouble]

226:4 227:16	tracker 62:2,8	tracks 119:7	255:17,19
229:11 268:23	62:12 71:2,2,9	182:1 185:8,8	258:7,8,8,11
268:24 269:1	74:17 76:22	185:10,11	260:18 285:9
277:16 281:9	78:5,25 79:23	traffic 24:13	285:13
took 77:16	81:22 85:15,25	81:20 88:6	transactions
135:11 153:14	86:7 137:25	93:20,21	41:21 44:5,8
173:18	138:5 139:10	120:17 141:12	45:4 46:12
tool 180:6	169:5 191:13	161:24,25	234:11 244:10
188:3,6,8	trackers 57:22	163:6,15,25	245:12,22
195:23	58:2 62:14,16	164:1,18,19	246:4,11
top 66:9 87:5	62:22 275:8	165:1,8 166:7	transcribed
171:23 177:20	280:1,20	166:7,18,20	294:10
254:11	tracking 23:3	168:16 170:20	transcript
topic 35:3	24:2 28:20	170:20,21,22	159:25 292:4
total 22:12	29:2,7 50:17	170:22,23,23	293:3 294:11
70:20 83:24	88:8 89:24	170:25 171:3,3	294:13,15
87:15 89:16	90:6,9 104:15	171:4,21 206:3	295:6,8,10,13
120:13 144:21	104:16 105:3	206:7,12,14,16	295:13,21
206:7 292:8	119:2,14	206:17,22	296:2,2
totality 258:11	171:13 177:5	207:3,4 228:1	translated
261:2	182:23 183:14	228:3,10	114:9
track 50:2,14	183:16 186:5,6	transaction	transmit
62:1 104:17	200:24 201:1	42:18 47:2,3,5	285:12
119:15 184:17	202:7,8 203:4	47:13 48:2	transmitted
184:19 185:2,2	203:10,19,21	52:17 53:6,24	285:1,2
185:6 192:20	204:1 205:17	54:1 60:8	trial 37:11 38:3
192:22 193:6	207:17,18,20	64:22 67:3	trick 160:12
197:2 201:23	207:22 208:5	134:11,16	222:1,7 237:4
202:2 203:2	208:13,15,24	135:4 235:16	237:7
216:19 241:20	208:25 210:16	236:19 244:7	tried 55:4,5
270:20 275:5	210:17,19	244:19,20	100:8 176:7
278:5	211:17 234:17	245:13,14,16	trillion 262:24
tracked 71:7	270:10 271:2	247:8 249:10	263:1,8
270:15	274:15,24	249:24 253:5	trouble 40:12
	275:9 280:2,20	254:16,18,21	282:1

[true - understand]

true 64:17 94:14 101:14 157:12,13 187:19 189:15 192:11 293:5 294:11	240:10 241:16 245:20 249:9 249:23 250:18 250:24 251:13 258:2 268:22 273:2,4	types 30:21,22 90:21 180:13 182:2,5,14 198:11	293:2 294:10 undercompen... 56:12
trustworthiness 78:2	turned 54:21 74:24 100:21 101:4 104:1 113:17 123:16 124:9 154:10 229:22 283:16	u	underlies 140:1 140:6
truth 11:8,8,9 100:15,20	turning 54:18 54:18	u.s. 154:14,20 154:25 155:5 174:15	underlying 139:20 206:11
truthfully 12:19 20:14	turns 20:10 98:9 136:7 143:24 209:2	uh 85:8,11 156:19 181:1 227:23 236:21 288:5	understand 20:2,3,5 26:11 29:16 33:2 34:12 42:22 51:23 52:8 55:14 58:16
try 37:9 43:19 50:19,25 84:25 93:15 117:16 119:25 120:22 123:25 159:1 167:3,12,17 197:23,25 257:19 279:1,2	twice 15:14 220:10	ultimate 207:6 225:3 258:10	72:1,13 74:4 74:22 76:7
trying 51:24 52:16 55:14 58:16 83:8,13 86:20,20 99:22 99:24 106:16 107:1,11,25 108:2 111:10 129:13 134:10 138:12 141:6,8 160:12 171:7 171:15 196:12 198:21 199:1 199:17 200:16 212:22 219:20 222:7 237:4,7	two 14:17 23:4 23:6 43:1 47:1 81:18 82:15 86:24 87:4 95:12,14 96:15 97:10 103:11 109:16 141:22 163:9 176:24 191:11 195:7,7 233:8 238:17 246:6,6 287:13	ultimately 29:9 61:13 68:16 117:25 122:6 162:21 219:6 254:20 255:19 257:9 260:18	83:7 84:12 85:24 88:1 90:14 94:2,22 97:11 99:16,17 103:21 105:20 106:16 107:4,9 107:11 108:18
	twofold 36:13	uncomfortable 199:24	110:20,22 112:20 116:2,5
	type 38:13 42:9 45:11 72:19 90:17 170:12 179:22 182:21	under 11:6 50:9 78:20 82:4,8 84:21 84:22 87:14 101:25 104:10 104:10,13,13 111:23 117:19 117:23,23	117:1 120:25 125:25 131:20 135:19 136:15 138:8,11,14 139:12 144:14 146:1,6,11,22 151:21 154:1
		205:18 211:4 213:13 243:23 267:5 268:20 268:24 269:4	159:10 160:17 161:2,8 163:4 164:8 165:5 175:6,9,22,23

[understand - use]

176:6,13 177:1	101:10,19,25	270:22 272:7	271:1 273:3,13
177:4 178:8	102:22 104:4,9	understands	273:20 276:18
189:1 192:4	104:25 105:16	128:5	unlawful 104:8
193:18,20	108:18 111:1	understood	194:8 198:23
194:4 195:18	111:10,25	85:25 86:7	203:9 213:6
198:18 199:1	112:6,9,14	110:3 120:20	unpersonalized
202:19 205:24	114:11 116:12	148:23 155:25	79:22,24
207:23,24	119:6 128:3	202:4 270:8	untouched
208:7,9 213:14	132:9 134:17	undertake	213:13
214:3 215:14	134:17 135:7	221:14	untracked
219:21 221:8	137:8 146:8	unfair 229:23	275:4
221:12 247:14	147:19,20	unfortunately	unwilling 51:14
249:9 254:15	148:12,17	173:20	51:25 52:12
255:14 263:3	149:17 150:24	uniform 64:4	54:11,19 67:9
268:20 269:3,5	154:12,16	unimportant	68:10,13
270:17 273:11	155:22,23	195:10	253:23,25
278:20 279:19	156:11 157:9	unit 9:13	259:15,18
287:7	160:16 176:5,8	united 1:1 2:1	uphold 147:6
understood	177:11,12	9:16	usage 62:13,17
86:21	182:9,15 183:1	universe	64:12 170:11
understanding	183:9,19 186:1	121:24	239:22
29:24 30:2	186:4 188:4	university 6:8	use 34:7 46:22
32:1,5,11,13,18	189:25 190:19	unjust 17:10	51:11 60:9,10
32:22 33:5,9	194:10,12	20:8 41:17	72:17 75:10,11
33:11,17 34:14	196:12 200:25	74:11 79:19	76:6 78:17,24
34:21 35:16,25	201:20 207:15	80:6,9,21	79:22 94:5
36:10,12 38:23	210:1 211:8,14	81:11 83:9	96:5,7,19
44:9 46:1	211:21 212:4	87:9 94:24	100:9,16,21
50:21 58:5	225:2,5,14,21	95:6,23 96:17	101:5 106:13
69:23 77:11	226:19,24	96:25 97:12	106:19 119:1,2
78:16,23 79:8	228:5 229:15	99:23 103:22	119:8,15,22
79:16,16 80:16	231:11 234:22	107:22 109:7	131:12 134:13
82:11,19 84:20	235:1 241:13	110:15 111:23	135:5 136:8
91:14,23 94:8	243:18 247:17	114:23 120:10	140:3 147:18
96:16 99:15,20	248:5 249:11	129:1 151:4	157:16 164:11

[use - users]

171:11 178:4	132:14 133:13	240:15,16	126:1,7 127:5
178:20 181:10	134:20 138:5	242:7 243:21	133:18 136:21
183:12 184:8	161:5,11	243:21 244:6	137:24 140:17
185:5,15	179:10,11,14	245:25 247:1,2	140:24 141:10
186:24 187:15	179:18,20,21	247:9,10,22	146:12 147:18
188:8 190:21	188:21,24	248:13,14,17	148:11 151:5
191:9 193:6	190:5,12,14,15	251:1,9 256:16	155:18,21,24
195:14 197:1	190:17 192:20	257:17 263:18	155:24 156:8
197:18,20	195:11 208:3	280:25	157:16,16,25
208:22 211:16	216:17,18	user's 72:8	158:10 159:2
212:11,14	233:20 235:3,4	106:7,19 108:7	163:14 164:17
214:11 216:5,6	235:12,13	150:25 151:23	164:17,19,20
216:16 218:6	236:25 238:7	238:13 244:9	164:21 165:15
220:5,8 221:20	251:3 292:8	users 61:3	167:22 168:14
228:24 234:5	useful 149:5	64:14,19 65:6	168:16,20,25
234:24 235:24	user 42:1 61:8	68:5 73:22	169:13,23
236:4,5,8	64:11 73:15	74:25 77:25	170:5,11 171:9
237:1,2,25	77:6,9 82:21	79:17 80:3,7	171:18 175:20
238:1,8,14,23	84:1 100:21	80:10,24 81:3	186:25 190:15
239:2,20	101:9,10,12	81:7 82:18	198:6,6 201:2
241:14 244:21	104:1,23	83:11 84:19	213:24 214:24
245:2,18	108:22 112:17	86:1,2 88:6	215:17,23
247:10 248:18	112:23 114:18	89:23 91:11	217:11,14
248:19,20,24	115:20,24,24	101:3 106:9	218:4 219:4,8
249:4 250:14	120:6 136:1,7	110:23 111:6	219:11,15
251:21 252:1,6	141:3 150:10	111:22 112:2	220:18,22
252:22 253:16	150:16,19,20	112:17 113:4,5	221:9,17
255:12 264:10	156:20 157:18	113:6,9,22,23	245:17,25
274:16 275:19	158:15 170:12	114:18 115:7	248:8,9 251:5
279:2 285:13	181:24 228:20	115:15,15	251:6 253:24
287:13,21	228:21 236:15	116:23 117:14	256:12 260:6
used 29:7 75:6	236:24 237:17	120:12 121:5,5	263:18,23,25
75:9,21 94:1	237:21 238:5	121:6 123:15	263:25 264:1,7
96:13 120:14	238:15 239:12	123:19 125:4	264:9 271:7,11
130:22 132:14	239:20 240:5	125:15,19	271:15,21

[users - wait]

272:3,10 274:3	150:1 200:18	valuing 46:13 46:15,18,19 47:8 48:2,3	71:17 110:7,10 144:4,7 174:2 174:5 200:3,6
274:25 276:21	272:6 274:20	variable 211:20	230:1,4 266:15
277:2,4,7	275:13 287:4	variance	269:16,19
285:10 291:21	validate 74:13	286:25	283:8,11 292:1
uses 136:8	valuable	varies 285:16	292:5
177:5,6 185:12	246:19	287:9	view 51:17 52:7
186:23 235:17	valuation 47:11	variety 67:6	52:9 243:8
239:15 242:21	value 42:17,17	139:24 209:15	281:19
using 60:22	43:15,23,25	various 17:7	viewed 165:2
68:15 75:25	46:19 47:16,18	24:16 25:15	visit 272:10
76:3 82:13	47:19,21 48:1	50:12,15	voice 35:21
83:19 97:18,24	48:6,11,19,23	vary 92:19	volume 1:16
104:24 107:18	49:3,7,10,12,14	286:9,14,17	7:3
109:21 110:17	49:16 50:7,21	287:1,8	vs 1:6 2:6
145:1 156:15	50:22 51:7	veritext 9:23,25	w
156:20 157:25	63:24 64:1	292:9 295:7,9	waa 54:21 61:3
164:25 184:17	65:3 68:24	295:11	61:3 71:6,22
188:3,6 202:3	79:1,2 81:10	version 16:22	71:25 72:5
203:2,13	81:14,15 83:11	146:3	82:13 86:14
208:18,18	83:16 84:1	versions 245:7	100:22 106:3
212:19 213:1	87:11 117:17	versus 9:15	161:24 163:6
213:10,18	119:1 149:5	30:6 32:8 79:2	164:17,17,19
217:14 234:6	233:21,24	79:4 90:12	164:20,21
235:18,22	234:5,5 239:17	132:11 144:21	168:24 172:12
236:16 237:3	240:9,10,21	144:21 226:4	172:17 173:1,6
239:18,23	241:5 242:15	253:23 262:23	181:10 218:7
243:22 246:1	242:21 244:17	262:24	237:14 253:24
252:10 255:5	244:20,22,24	vice 6:11	273:16,22
274:14 289:5	244:25 245:2	video 1:13 9:10	275:10 277:7
290:23 294:9	245:10,11,19	9:14	278:6,16 280:3
usually 287:13	259:23	videographer	281:20
v	valued 246:16	5:22 9:5,23	wait 88:14,15
v 295:4 297:1	values 162:20	10:20,24 71:13	95:25 140:12
vague 39:11	238:15		
79:11 108:23			

[wait - works]

152:22 163:22	warming	70:24 94:3	239:5 242:2
241:5	173:20	103:6 106:4	251:1 253:23
waived 295:23	warning 45:1	169:5 173:16	259:14 264:3
295:23	warty 6:14	204:6 229:5	willingness
waiving 295:20	washington	web 3:13 4:5,6	263:19,20
wand 171:10	1:23	4:16 5:6 6:3	willkie 2:15 5:4
want 18:18	wave 171:10	72:5,5,14	6:13 10:13
37:17 43:17	way 18:1 37:10	106:3 108:7	willkie.com
44:18,25 54:17	38:7 41:5,8	201:9 209:14	5:12,13 295:2
56:20 61:22	73:19 74:1	210:4,11 211:6	withdraw
71:21 72:9	83:22 84:5	228:21 255:3	73:18 101:1
82:2,8 87:24	86:6,20 99:14	289:20 290:22	222:13
88:16 103:8	101:1 104:17	290:22 291:14	witness 11:1
105:20 107:1,7	124:20 133:14	website 114:13	17:18 268:23
107:13 110:20	135:12 136:17	116:14 177:15	269:14 294:19
116:4,7,8,9,15	141:17 142:3	177:24 178:2	295:13,16
116:18 137:11	146:13,14	228:18	296:2,5 297:24
140:13 141:2	148:13 149:24	week 23:12,13	witnesses 294:6
144:14 171:4	161:5 164:2,3	weigh 69:25	word 72:23,25
189:8,9 196:14	164:7 167:17	weighed 70:19	149:2,2 213:1
199:23 220:13	183:17 184:1	weird 249:18	words 54:5
221:12 230:8	184:20 196:25	went 37:10	149:4 231:19
231:23 237:12	208:17 213:3	59:8 70:18	280:24
238:6 239:2	223:6 225:18	121:17,17	work 14:1
241:1 254:5	233:20 234:2,2	whereof 294:19	31:13,14 33:13
255:21 256:2	237:13 245:5,5	whispering 9:8	33:14 44:13,17
273:11 274:11	257:1,20	wider 254:17	45:17 119:11
283:5 284:12	278:16 279:1	willing 42:1	127:15 149:24
288:22	283:4 287:18	50:22,23,24	worked 44:8
wanted 45:6	ways 116:6	51:2,12,25	45:4,17
284:6	209:15,24	52:13,17,17,19	working 98:7
wants 121:2	213:2 255:1	53:1,3,4,7,23	works 14:25
185:5 272:5	we've 16:21	54:6,10,10,22	15:7 32:14
warm 174:1	26:22 35:7	67:8 69:18	33:5 34:6
	38:8 65:10	120:4 124:17	70:16 107:24

[works - yup]

149:24 201:18	wrong 20:20	244:15 278:1
world 82:25	86:4 97:8	288:16
83:10 96:12	152:12 160:10	year 15:9
97:16 98:20	227:20 262:21	153:15 155:7
99:7 104:19	wrongful 24:25	169:12,17
109:24 110:16	63:6,9 95:7	181:11 212:10
110:23 112:22	wrote 72:24	212:11
114:24 115:6	x	years 145:2,4
118:8 124:13	x 7:1,10 8:1	154:13,19,20
125:14,17,18	294:15 296:9	155:12 198:16
125:22 126:12	y	york 4:19,19
129:7,15,18,22	yanchunis 4:6	6:8
129:23,24	yeah 35:10	youtube 139:9
130:1 131:11	44:20,24 45:25	139:17,18
132:11,12,13	46:7,17 47:20	169:18 170:5
132:15,18	61:20 64:3	yt 169:16,23
134:8,18 135:8	70:5 73:20	yup 143:15,17
146:22 149:23	83:21 85:12	172:10 174:17
189:2 213:17	86:5 88:18	230:15
214:9 218:25	93:5 95:20	
219:2 243:8	97:6 103:10,11	
272:1,16	107:15 108:15	
273:19 274:2	127:14 135:18	
274:18	139:4 143:4	
worried 76:3	144:3 153:25	
160:11 233:4,8	155:5 160:12	
233:9 288:16	160:24 163:12	
worthless	167:13 168:15	
69:15,17	173:17 175:12	
write 72:21	175:14 176:10	
167:24,25	178:12 185:20	
222:5	196:16 197:19	
writing 73:3,9	206:2 207:24	
written 278:16	235:24 243:13	

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.